BRITISH COLUMBIA

MEASURING SUCCESS: A REPORT ON CHILD AND FAMILY OUTCOMES IN BC

Ministry of Children and Family Development

May 2002

105-03626/

MEASURING SUCCESS:
A REPORT ON CHILD AND FAMILY OUTCOMES IN BC

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EXECUTIVE SUMMARY

Measuring Success: Report on Child and Family Outcomes in BC is a reporting tool used by the Ministry of Children and Family Development (MCFD) to monitor and report the status of physical health as well as other socioeconomic well-being of children, youth and families in BC. This is the 3rd update of the information of an earlier report published by the former Ministry for Children and Families entitled Measuring Our Success. The release of this report represents the Ministry's commitment to the continued monitoring and reporting of provincial level performance on population-level outcomes. The monitoring of the outcomes and indicators allows the Ministry to assess the extent to which the collectivity of promotion, prevention and intervention services and strategic approaches undertaken in the province make a difference at the population level.

Eleven new indicators have been added to this edition, for a total of 78 indicators and approximately 130 measures[1]. To be consistent with the earlier reports, indicators in this report are presented under four societal level goals.

This report shows overall improvements in about two-thirds of the stated objectives for population outcomes. By far, a majority of the measures deal with the first two goals and this is related primarily to data availability. Of the 13 objectives for which data are available, the following results have occurred since the base year of 1995 (the year immediately prior to the formation of MCF); 8 show overall improvement, 2 show overall decline and 3 show no overall discernible change.

For Goal #1, To Promote the Healthy Development of Children, Youth and Families, overall improvement was found in 5 of the 9 objectives:

- to optimize the health of babies at birth;
- to optimize the health and well-being of youth;
- to optimize the health and well-being of families with children;
- to reduce teen pregnancy; and
- to reduce suicide by children and youth.

A decline was found in two of the objectives:

- to optimize the health and well-being of children; and
- to reduce substance abuse by children and youth.

There was no discernible change to the following two objectives:

- to optimize the health and well-being of infants and young children; and
- to reduce substance abuse by adults.

For Goal #2, To Protect Children and Youth from Abuse, Neglect and Harm, overall improvement was noted for two of the three objectives:

- to reduce the abuse, neglect and harm of children and youth; and
- to reduce unintentional injury and premature death of children and youth.

No discernible change was found for the objective to reduce the occurrence and spread of vaccine preventable disease.

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[1] Newly added indicators are italicized in the data tables for easy recognition and a detailed list of new additions can be found in Appendix B. As well, the indicator: Average lengths of stay of adults with developmental or multiple disabilities in tertiary care facilities has been dropped, due to problems with data availability.

For Goal #3, To Support Adults with Developmental or Multiple Disabilities to Live Successfully and Participate in the Community, relevant population level indicators have yet to be developed.

For Goal #4, To Protect Public Safety, improvement was found for the one objective, which was to reduce youth involvement in crime.

Although the large majority of objectives have shown overall improvement, there are areas that require further attention in order to improve the health and well-being of children and youth. Clearly, there is a need for more emphasis to be placed on reducing substance abuse by children, youth and adults.

It must be noted that this report is not a vehicle to assess the performance of the Ministry of Children and Family Development[2] since Ministry programs are only one of the many influences over the overall health and well-being of children and families within the province. Other government and non-government community agencies and programs also affect these outcomes as well.

Nevertheless, the information contained in this report can be considered to be the broader societal goals and objectives of the Ministry of Children and Family Development. Other Ministries and organizations are encouraged to use his report to inform evidenced-based planning for programs and services for children, youth and families.

MCFD will be soliciting feedback and response to this document from key stakeholders and will continue to review current research and data sources. MCFD will also use this document to facilitate and promote collaborative strategic approaches with other ministries and levels of government, service partners, and other stakeholders to improve these population outcomes.

[2] This assessment can be assessed through the Ministry's Service Plan and Service Plan Report that will be available at http://icw.mcf.gov.bc.ca/.

INTRODUCTION

The purpose of this document is to report provincial level performance on population-level outcomes related to children, youth and families. This document updates the information of an earlier report published by the former Ministry for Children and Families entitled *Measuring Our Success: A Framework for Evaluating Population Outcomes*, which was first published in October 1997. A second edition was published in 1999. This 3rd edition contains the most recent and accessible provincial data available, as well as benchmarks data from other jurisdictions for comparison purposes. There are a total of 78 indicators with 130 measures for a net gain of 13 indicators or 16 measures compared to the last publication. Provincial measurements for each of the indicators for multiple years are presented in the Performance Report section. Appendices and a feedback form are also included.

Fourteen (14) indicators that appeared in 1997 *Measuring Our Success* publication have been excluded in this report because there were only limited or no data available to monitor performance over time. The decision to eliminate these indicators resulted in two outcome objectives not being considered in this report. The Ministry will continue to research potential indicators for these objectives for the next edition of *Measuring Success*.

"A fair amount of data in this report can be updated on an annual basis (see Appendix D -*Annually Updated Indicators by Data Sources*). The 2001 data for these portions of the report will be posted in the same web-site in July of 2002."

DEFINITIONS OF KEY CONCEPTS USED IN THIS REPORT

The Ministry of Children and Family Development has a commitment to performance management and measurement as a means of directing the organization to achieve its operational, compliance and financial objectives. Performance management is intended to improve accountability (i.e., the ability of the ministry to report on its responsibilities) and to improve the performance of the Ministry with respect to both its results and processes. A central feature of the performance management approach adopted by the Ministry is that it increases the focus on *outcomes*.

OUTCOMES

Outcomes refer to results, which include all of the possible consequences (whether intentional or unintentional) that arise from actions undertaken. The outcomes of interest to the Ministry of Children and Family Development are related to individuals and are organizational in nature.

Outcomes for individuals are results for people and may be related to identifiable clients or to target populations. These outcomes tend to be focused on changes to health, well-being or status.

Organizational outcomes are results for the service delivery system and are often focused on changes to structure, processes, resource utilization, products, or amount of services delivered. These outcomes may mediate, or contribute to, individual outcomes.

While both categories of outcomes are important, human service-providing organizations have historically had difficulty identifying and measuring outcomes related to individuals. Thus, the Ministry has focused its efforts in this area. Such outcomes, after all, provide the rationale and focus for the Ministry's work.

INDICATORS

An Indicator can be considered an operationalization of an outcome. Indicators are used to measure the existence and direction of change and to assess whether observed changes are consistent with the achievement of desired outcomes and goals. The purpose of indicators is to flag particular areas that require attention. Their usefulness rests in changes over time against a standard (or benchmark) or comparisons among regions.

The baseline data were established for 1995, or as close to that year as possible, so that conditions immediately prior to the Ministry of Children and Family Development being created could be established and changes measured following the Ministry's creation.

POPULATION OUTCOMES FRAMEWORK

The *populations outcomes framework* used in this report consists of:

- four goals, or general statements, of the desired results to be achieved;
- outcome objectives for each goal. The outcomes in the *Framework* are person-referenced and focus on health, well-being and status at a population level. The outcomes are phrased as objectives to indicate the desired direction of change;

- a set of indicators for each outcome objective. An indicator is a specific measure of an outcome. It is usually expressed here as a percent (number per 100 population) or rate (number per 1,000 or more population);
- provincial measures for each indicator. (The measures on each indicator are provided for the most recent year available and for up to previous five years); and,
- benchmark data for each indicator.

BENCHMARK

Benchmark refers to the reference point on a given indicator against which provincial achievements can be compared. Ideally, benchmark data reflect a desired level of performance, determined by what has been achieved in a comparable jurisdiction (best practice); by what is thought to be reasonably achievable based on historical performance, research and evaluation findings; or as established by authorities with an operational interest in the outcomes (target).

PRECAUTIONS

Five considerations should be kept in mind while examining the provincial performance data and the benchmark data. First, there are instances where the provincial and benchmark data are not directly comparable as the data are derived from different sources that use slightly different measures or definitions. Second, differences between the provincial data and benchmark data are not necessarily statistically significant. Third, the attribution of cause and effect in changes cannot be readily established as many factors influence these changes, not all of which can be related to the programs or actions of the Ministry of Children and Family Development. Fourth, in 1998 BC Vital Statistics Agency has updated its standardized population base from 1971 to 1996, which is reflected in the relevant data reported in the current update. Lastly, data may not always reconcile with data presented in released or future reports. Discrepancies may exist due to the ongoing, amending and updating of the data.

Future Access to This Document

Measuring Success can be accessed on the Ministry website at http://www.mcf.gov.bc.ca/. Updates and revisions to the current information will be available there. To access the most current data regarding the Framework's indicators, please check the site periodically.

Next Steps

In order to improve the quality and usefulness of reporting on population level child and family well-being outcomes over time, the Ministry will do the following:

- continue to monitor population health and wellbeing indicators at the province and region levels, in order to aid Ministry's planning functions and effective resource and services allocations.

- continue to promote collaborative strategic approaches with other ministries, levels of governments, service partners, communities and other stakeholders to improve these population outcomes.

- continue to review the research literature as frameworks of this nature need to remain dynamic and be modified as new, better information becomes available; and,

- solicit feedback from those who use the *Measuring Success* so its usefulness can be improved.

From these processes, it is anticipated that better measures and indicators will be included in future releases of the report.

REPORT PRESENTATION

This section contains the population outcomes framework used to report outcome data. It has four sub-sections, each corresponding to one of the broader population goals. Each sub-section contains a summary page, which describes the goal and highlights key findings.

Layout

For each goal, the outcome objectives and associated indicators are presented in separate tables. Provincial performance data and benchmark data are provided for each indicator. The provincial performance data presented focused primarily on the period of1995 through 2000, as the MCFD was created in 1995. Shaded cells denote that data are unavailable for a given year due to the periodicity of data collection. Blank cells denote that data are collected but not yet available.

Trends

As with previous editions of *Measuring Success*, the general direction of performance in the province is presented in the column labeled "Trend" for each indicator. An upward arrow (↑) indicates where there has been a trend of improvement, while a downward arrow (↓) represents a trend of decline. A diamond (◆) is used to indicate no trend change has occurred. T-tests[3] have been used to test the significance of trend where there are five or more observations available, although in most cases, ten-year's worth of data was used. As a result, if a trend is "significant", then the trend has been tested and shown that, with 80% confidence, it is improving (or declining) denoted by a superscripted S (e.g. $\uparrow^S$ or $\downarrow^S$). Although the six-year data are presented in the data table, the most recent ten-year data, where feasible, were used in determining the trend. As a result, in some cases, the directions shown in the "trend" column may differ from what one would intuitively conclude through a visual inspection of the data presented.

Data Notes

Following each table are notes pertaining to each indicator – providing the data source, definition, rationale and nature of the benchmark. Benchmarks are a type of performance target. Ideally, benchmark data reflect the achievements of comparable jurisdictions. The benchmarks in *Measuring Success* represent the best performance among Canadian provinces for each given indicator (national). Where provincial data for benchmarks are unavailable or unsuitable, benchmarks are selected from Canadian national data (national average). International benchmarks are indicated if suitable Canadian provincial or national benchmarks are unavailable. (In some cases, international benchmarks are included with Canadian Benchmarks if the international benchmarks are notably more desirable than the Canadian benchmarks). In the event that the benchmark is not an exact match to the indicator, the pertinent information will be noted.
For some indicators, predetermined targets are used as another way of benchmarking. Information about the type of benchmark used for the indicator is provided under the heading "Nature of the Benchmark."

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[3] The t-test is commonly used to test whether a slope (beta) is significantly different than zero. The main hypothesis of the test is to assume that the slope is flat (no change of trend). If the test statistics returns a value that is greater than the critical value, then the main hypothesis must be rejected in favour of an alternate hypothesis – the slope is not flat. If this is the case, then the slope lies in a region of the t-distribution that is very small, and with 20% probability, the distribution would not occur there if the slope was flat. As a result, the slope is "significantly" different than zero. Due to limited number of data points, a wider range of level of significance, i.e. 20% instead of 5% or 10% is used for this report.

GOAL #1: To Promote the Healthy Development of Children, Youth and Families

The first goal, *to promote the healthy development of children, youth and families*, and its associated outcome objectives and indicators, looks at the healthy development and functioning of children from infancy through adolescence. It addresses the capacity of families to care for their children and flags critical issues that affect the health and well-being of youth. It also includes one outcome objective which focuses on substance abuse among adults.

This goal has 9 outcome objectives and a total of 76 measures on 53 indicators and sub-indicators. As noted in the introduction to this section, one outcome objective (*to optimize the health and well-being of children and youth with disabilities*) was dropped from the Framework due to the lack of data. The absence of data on children and youth with disabilities is a significant weakness. Another limitation is that three of the outcome objectives have only one indicator which can be monitored annually. These outcome objectives relate to children in the 1-4 year age group, families with children, and suicide.

Highlights

For this section, of the 76 measures for which there was available trend information, the general trend in performance has been improving over the years reported for 39 (54%), no discernible change for 11 (15%), decline of 22 (31%) of the measures. There were 3 measures which trend data were not available at the publication date of this report. Overall, the data show that we are moving in the desired direction in terms of the healthy development of children, youth and families in BC. Particularly noteworthy trends are listed below:

Progress	Needing Improvement
Infants	
• Fewer infants are dying early in life with deaths due to preventable causes, such as SIDS. • Expectant mothers report a decline in behaviours (drinking and smoking) which can be injurious to infant health. • The rate of a major threat to infant health (neural tube defects) has decreased.	• The rate of a major threat to infant health (low birth weight) has slightly increased.
Young children	
• Young children appear to be developing well in BC with an increasing majority of preschoolers within or above the normal range of verbal and motor/social skills. • There has been a slight decrease in mortality rates among children 1-4 years of age.	

Progress	Needing Improvement
School age children and youth	
• The majority of children continue to look forward to going to school, an attitude, which supports school achievement and participation. • An increase in percentage of parents who report their children get along with peers. • The high school completion rate has been generally stable. The completion rate of 75.3% is just above the national average.	• An increasing percentage of children exhibited emotional distress
Youth issues	
• The teen pregnancy rate, teen birth rate and percent of sexually active females using contraception all improved indicating progress consistently for this outcome objective. • Deaths directly related to alcohol are rare among children and youth. Deaths in which alcohol is a factor are more common but have been decreasing. • Drug-induced deaths have also been declining among children and youth. When they do occur, it is typically among the 15-19 age group. • Suicide ideation and attempts have decreased among youth. • The suicide rate among youth and younger children has also decreased.	• An increased number of both male and female students reported smoking cigarettes on a regular basis and drinking alcohol.
Family	
• Slight improvements were seen along several dimensions of family functioning including how well the family works together; the existence of positive interactions between children and their parents; • There has been a slight increase in the number of children whose parents report maintaining a non-violent home.	
Adult addictions	
• There has been a decline in the rate of deaths indirectly related to alcohol (both directly and indirectly). • There has been a decreasing number of drug induced deaths.	• An increasing percentage of the adult population is drinking more heavily.

OUTCOME OBJECTIVE 1.1 To Optimize the Health of Babies at Birth

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Infant mortality rate Per 1,000 live births	5.9	5.0	4.6	4.0	3.7	3.7	PEI 4.6 (1996) Japan 3.8 Sweden, Finland 4.0 (1999)	↑[5]
2. Rate of low birth weight babies Per 1,000 live births	52.6	51.4	52.3	50.2	47.5	51.0	NB 51 (1996) Tonga 20 Norway, Spain, Ireland, Finland, Belize, Ireland, Rep. of Moldova 40 (1990-97)	↓
3. Percentage of women who (A) smoke or (B) drink during pregnancy	(A) 19.6 (B) 15.9 (1994)	(A) 18.3 (B) 12.5		(A) 12.9 (B) 12.0			(A) BC 12.9% Can 19.4% (1998) (B) Nfd 5.0% Can 20.0% (1998)	↑
4. Rate (per 1,000 live births) of new-borns born with: (A) FAS[4] (B) Drug withdrawal syndrome or noxious influences transmitted to placenta	(A) 0.04 (B) 0.04	(A) 0.04 (B) 0.09	(A) 0.05 (B) 0.07	(A) 0.00 (B) 0.12	(A) 0.12 (B) 0.02	(A) 0.02 (B) 0.02	Canada 1-2 (1994/95) (A) 0.02 BC (2000)	(A) ◆ (B) ◆
5. Rate of infants testing positive for HIV Per 100,000 <18 months children population	1.4	0.7	1.4	1.4	0	0	Target 0	↑[s]
6. Rate of neural tube defects Per 1,000 live & still births	0.3	0.4	0.3	0.3	0.29	0.27	England, Wales 0.13 (1998)	↑[s]
7. Rate of Sudden Infant Death Syndromes (SIDS) Per 1,000 live births	1.0	0.5	0.6	0.4	0.4	0.3	Japan 0.23 (1996)	↑[s]

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***Italic*** are new additions.

NOTES ON INDICATORS

1.1.1 INFANT MORTALITY

Definition
Deaths of infants less than 1 year old per 1,000 live births.

Source
BC Vital Statistics Agency; Statistics Canada; UNICEF, *State of the World's Children 2001;* Health Canada, *Measuring Up*

[4] The fetal alcohol syndrome rates are based upon the Physician Notifications of Birth. FAS is difficult to diagnose at birth and may be unrecognized until delays in developmental milestones. Thus, these rates do not reflect the actual prevalence of FAS/E at birth.

Rationale
The infant mortality rate is a fundamental measure of health. It is associated with inadequate prenatal care, low birth weight, mother's age and mother's socioeconomic status.

Nature of Benchmark
Jurisdictional best performance - national/international.

1.1.2 LOW BIRTH WEIGHT BABIES

Definition
Infants born at less than 2,500 grams per 1,000 live births.

Source
BC Vital Statistics Agency; Alberta Vital Statistics; UNICEF, *State of the World's Children 2001*; Statistics Canada, *The Daily*, July 8, 1998.

Rationale
The weight of a baby at birth is a key indicator of infant survival, health and development. Low birth weight babies are more likely to die during their first year. They are also more likely to experience birth defects, mental retardation, developmental delays, chronic respiratory ailments, and learning difficulties. Some of the known causes are smoking by the mother during pregnancy, lack of nourishment in the mother's womb, pregnancy-induced hypertension, and multiple births.

Nature of Benchmark
Jurisdictional best performance - national/international.

1.1.3 WOMEN WHO SMOKE OR DRINK DURING PREGNANCY

Definition
Number of mothers of children less than two years old smoking tobacco or consuming alcohol during all or part of their pregnancy expressed as a percentage of all mothers of children less than two years old surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY), 1998.

Rationale
Mothers' use of tobacco and alcohol are prenatal behaviours that have been associated with risks to the infant. It has been determined that smoking during pregnancy leads to higher rates of low birth weight, stillbirth, prematurity and breathing problems at birth. Alcohol intake poses the greatest risk around the time of conception and during the first trimester. Consuming alcohol during pregnancy has been linked to health concerns such as fetal alcohol syndrome, low birth weight, spontaneous abortion, death of the infant around the time of birth and alcohol withdrawal in the newborn.

Nature of Benchmark
Jurisdictional best performance – national/national average.

1.1.4 NEWBORNS DIAGNOSED WITH FAS/DRUG WITHDRAWAL SYNDROME OR NOXIOUS INFLUENCES

Definition
As indicated on Physician Notifications of Birth (PNOB) forwarded to the BC Vital Statistics Agency, expressed as a rate per 1000 live births.

Source
BC Vital Statistics Agency.

Rationale
Fetal Alcohol Syndrome (FAS) is a medical diagnosis that refers to a set of alcohol related disabilities associated with the use of alcohol during pregancy. FAS is one of the leading causes of reduced or delayed growth, birth defects and/or developmental delays in children. FAS is 100% preventable.

Nature of Benchmark
Not yet developed.

1.1.5 INFANTS TESTING HIV POSITIVE

Definition
Infants testing HIV positive within 18 months of birth, expressed as a rate per 100,000.

Source
BC Centre for Disease Control Society; BC Provincial Health Officer.

Rationale
HIV antibodies, which indicate the presence of HIV, are transferred from mother to infant through the placenta. Data have shown that mother-to-child transmission can be prevented in many cases if HIV-positive women take AZT during pregnancy and during the birthing process.

Nature of Benchmark

1.1.6 NEURAL TUBE DEFECTS

Definition
Anomalies diagnosed at birth per 1,000 live and still births.

Source
BC Vital Statistics Agency; Health Canada, *Measuring Up, 1999.*

Rationale
The number of infants born with neural tube defects is a proxy measure of prenatal maternal health. Research suggests that at least 50% of neural tube defects can be prevented if women take sufficient amounts of folic acid (one of the B vitamins) prior to conception and during the first three months of pregnancy.

Nature of Benchmark
Jurisdictional best performance – international

1.1.7 SIDS DEATHS

Definition
Number of confirmed deaths due to Sudden Infant Death Syndrome per 1,000 live births.

Source
BC Vital Statistics Agency; *World Health Organization*, World Health Annual Statistics.

Rationale
SIDS is a major source of infant mortality where the cause is unknown.

Nature of Benchmark
Jurisdictional best performance - international.

OUTCOME OBJECTIVE 1.2 To Optimize the Health and Well-Being of Infants and Young Children

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Mortality rate for children ages 1-4 years per 1,000 age cohort population	0.15	0.24	0.20	0.21	0.18	0.14	PEI 0.1 (1994) Japan 3.8 Finland, Sweden 4.0 (1998)	↑*
2. Percentage of mothers who: (A) breast-feed (B) breast-feed more than 3 months	(A) 88.8 (B) 59.6 (1994)	(A) 80.0 (B) 66.3		(A) 95.2 (B) 68.5			(A) BC 95.2% (B) AB 69.8% (1998)	(A) ↑ (B) ↑
3. Percentage of children with good verbal skills	80.7 (1994)	84.9		83.6			PEI 92.6% NS 90.9% (1998)	↓
4. Percentage of children with good motor and social skills	87 (1994)	87.2		88.1			QUE 90.6% (1998)	↑

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

1.2.1 CHILD MORTALITY, AGE 1 - 4 YEARS

Definition
Deaths of children aged 1 - 4 years of age per 1,000 age cohort population.

Source
BC Vital Statistics Agency; Statistics Canada; OECD Health Data 2001. National Longitudinal Survey of Children and Youth, 1998

Rationale
Child mortality is a fundamental measure of health used by jurisdictions throughout the world. It can be associated with inadequate nutrition, lack of proper immunization, injury and/or abuse or neglect.

Nature of Benchmark
Jurisdictional best performance -national.

1.2.2 MOTHERS WHO BREAST-FEED

Definition
Number of mothers of children less than two years old who (A) breast-fed their most recent child and (B) breast-fed for at least 3 months expressed as a percentage of all mothers of children less than two years old surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY).

Rationale
Breast-feeding has been linked with numerous positive benefits including improved bonding between mother and infant and better development of social behaviours. Breast milk contains the essential nutritional building blocks to sustain a rapidly growing infant. In addition, breast milk contains the mother's anti-bodies, which help to strengthen the infant's immune system.

Nature of Benchmark

Jurisdictional best performance - national.

1.2.3 YOUNG CHILDREN'S VERBAL SKILLS

Definition
Number of children age 4 - 5 years with verbal ability within or above the normal range of development expressed as a percentage of all children this age in the survey. Verbal ability was assessed using the revised *Peabody Picture Vocabulary Test (PPVT-R)*. Both English and French-speaking versions were used. The tests assess the number of words the subject understands and can be used for any age group, up to adults. The child looked at pictures on an easel and points to the picture that matches the words, which is read out by the interviewer. Both a raw score and a standardized score (factoring age for cross-child comparison) were assigned. In terms of the standardized score, the mean was 100 and the standard deviation was 15. Therefore, children who scored between 85 and 115 are considered to be within the normal range. Scores of 116 or more are considered above normal and while scores of less than 85 are considered below normal.

Source
Statistics Canada's *National Longitudinal Survey of Children and Youth (NLCY)*, 1998

Rationale
Verbal ability is one of many measures of "school readiness". If children are equipped with the skills to learn such as verbal ability, learning in a school environment can build on and enhance these skills.

Nature of Benchmark
Jurisdictional best performance – national.

1.2.4 YOUNG CHILDREN'S MOTOR AND SOCIAL SKILLS

Definition
Number of children age 0 - 3 years with motor and social skills within or above the normal range of development expressed as a percentage of all children this age in the survey. The Motor and Social Development (MSD) scale was used to measure various dimensions of motor, social and cognitive development. Parents are asked to respond to 15 questions. Questions were altered depending on the age of the child. The results were combined into a single scale on which a score of 100 indicated normal development. Children who were within 15 points above or below 100 were considered to have normal motor, social and cognitive development. Those below 85 points displayed symptoms of delayed development, while those above 115 points displayed advanced development.

Source
National Longitudinal Survey of Children and Youth (NLSCY).

Rationale
This measure is an indicator of how well children are developing in comparison to their peers. Motor and social development are key components of a healthy, optimally functioning child.

Nature of Benchmark
Jurisdictional best performance - national.

OUTCOME OBJECTIVE 1.3 To Optimize the Health and Well-Being of Children

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Mortality rate for children age 5-14 years per 1,000 cohort population	0.15	0.16	0.17	0.12	0.12	0.10	Canada 0.2 (1995)	↑
2. Percentage of children who are sad or depressed sometimes	43.7 (1994)	57.4		49.9			Canada 49.0% Nfd 43.4% (1998)	↑
3. Percentage of children exhibiting emotional distress	9.5 (1994)	9.5		11.4			Canada 8.2% (1998)	↓
4. Percentage of children who get along with their; (A) mothers (B) fathers	(1994) (A) 76 (B) 82	(A) 86 (B) 90		(A) 79.5 (B) 81.2			(A) Nfd 92.8% (B) Que 91.9% (1998)	(A) ↓ (B) ↓
5. Percentage of children whose parents report harmonious parent/child relations	85.3 (1994)	83.5		84.0			Que 92.3% (1998)	◆
6. Percentage of children who get along with their peers; (A) quite well (B) very well	(1994) (A) 54.7 (B) 25.8	(A) 48.8 (B) 24.8		(A) 44.1 (B) 30.8			(A) NFD 38.6% (B) NB, Que 49.3% (1998)	(A) ↓ (B) ↑
7. Percentage of children whose parents report their children get along with peers	86.7 (1994)	81.2		88.8			Que 92.9% Canada 88.6% (1996-97)	↑
8. Percentage of children doing well in numeracy (A) grade 4 (B) grade 7					(A) 86 (B) 83	(A) 79 (B) 80	To be developed	n/a
9. Percentage of children doing well in reading (A) grade 4 (B) grade 7					(A) 82 (B) 84	(A) 80 (B) 81	To be developed	n/a
10. Percentage of children doing well in writing (A) grade 4 (B) grade 7					(A) 87 (B) 72	(A) 91 (B) 81	To be developed	n/a
11. Percentage of . . taking part in physical activity (A) girls (B) boys	(A) 72 (B) 81 (1992)			(A) 72 (B) 77			Canada (A) 71 (B) 82 (1993/94) Canada 96.2 (1995) Norway 98 (1995)	(A) ◆ (B) ↓

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
12. Percentage of children who look forward to going to school	86 (1994)	86.1		88.8			AB 89.2 (1998)	↑
13. Percentage of young children caries immune	66.8	67.5	65.8	63.6	62.0	61.2	Target 70	↓*

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

1.3.1 CHILD MORTALITY, AGE 5 - 14 YEARS

Definition
Deaths per 1,000 children age 5 - 14 years.

Source
BC Vital Statistics Agency; Statistics Canada.

Rationale
Child mortality is a fundamental measure of health. It can be associated with inadequate nutrition, lack of proper immunization, injury, suicide and/or with abuse or neglect.

Nature of Benchmark
Jurisdictional best performance - national.

1.3.2 CHILDREN WHO ARE SAD OR DEPRESSED

Definition
Number of children age 10 -11 years answering "sometimes, often, or somewhat true" to the statement "I am unhappy, sad or depressed" expressed as a percentage of all children this age surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY), 1998.

Rationale
How children feel is an important indicator of their health and well-being. Optimal health and well-being are impossible to achieve if a child is depressed. Mental well-being has been correlated with physical well-being and depression has been correlated with numerous adverse physical and mental symptoms.

Nature of Benchmark
National average, Provincial.

1.3.3 CHILDREN EXHIBITING EMOTIONAL DISTRESS

Definition
Number of children age 10 -11 years answering "sometime or somewhat true" to the statement "I am unhappy, sad or depressed", expressed as a percentage of all children this age surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY), 1998.

Rationale
Parental perceptions of their children's emotional state may have a bearing on their judgments regarding interactions with themselves and others. Conflicted perceptions between parents and children or misjudgments by parents can serve as an indicator of actual or potential risk, especially for families in crisis.

Nature of Benchmark
National average.

1.3.4 CHILDREN WHO GET ALONG WITH THEIR PARENTS

Definition
Number of children age 4-9 years answering "very well/no problem" or "quite well/hardly any problems" in response to the questions, "During the past 6 months, how well have you gotten along with your (A) mother and (B) father?" expressed as a percentage of all children this age surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY), 1998.

Rationale
How well children get along with their parents is one way to determine the level of harmony within a family unit. It is widely believed that living in a happy, harmonious home-environment is conducive to the health and well-being of children.

Nature of Benchmark
Jurisdictional best performance - national

1.3.5 CHILD/PARENT RELATIONS, PARENTAL PERCEPTIONS

Definition
Percentage distribution of children age 4 -11 years with parents answering "very well/no problem" or "quite well/hardly any problems" in response to the question: "During the past 6 months, how well has your child gotten along with his/her parents?"; expressed as a percentage of all children this age surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY).

Rationale
Parental perceptions of their children's emotional state may have a bearing on their judgments regarding interactions with themselves and others. Conflicted perceptions between parents and children or misjudgments by parents can serve as an indicator of actual or potential risk, especially for families in crisis.

Nature of Benchmark
Jurisdictional best performance - national.

1.3.6 CHILDREN WHO GET ALONG WITH THEIR PEERS

Definition
Number of children age 4 -9 years answering (A) "quite well" or (B) "very well" in response to the question, "During the past 6 months, how well have you gotten along with other kids, such as friends or classmates (excluding brothers or sisters)?" expressed as a percentage of all children this age surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY).

Rationale
It is widely believed that a positive social network is particularly important to the emotional well-being of children.

Nature of Benchmark
Jurisdictional best performance - national.

1.3.7 CHILD/PEER RELATIONS, PARENTAL PERCEPTIONS

Definition
Percentage distribution of children age 4 -9 years with parents answering (A) "quite well" or (B) "very well" in response to the question: "During the past 6 months, how well has your child gotten along with his/her peers?"; expressed as a percentage of all children this age surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY).

Rationale
Parental perceptions of their children's emotional state may have a bearing on their judgments regarding interactions with themselves and others. Conflicted perceptions between parents and children or misjudgments by parents can serve as an indicator of actual or potential risk, especially for families in crisis.

Nature of Benchmark
Jurisdictional best performance - national.

1.3.8 PERFORMANCE LEVELS OF CHILDREN ON NUMERACY IN FOUNDATION SKILL ASSESSMENT

Definition
The percentage distribution of students in (A) grade 4, (B) grade 7 who meet or exceed expectations on numeracy in the British Columbia annual provincial Foundation Skills Assessment (FSA).

Source
Ministry of Education, British Columbia, 2001.

Rationale
Numeracy achievement is one component of academic performance which, in turn, measures the overall knowledge and capabilities of a student. Academic performance is highly correlated with nutrition, stable housing, family functioning, self-esteem, educational attainment of parents, and socioeconomic status. Academic performance is an indicator of a student's readiness to acquire more skills and knowledge, and thus to proceed to higher grade levels.

Nature of Benchmark
To be developed.

1.3.9 –1.3.10 PERFORMANCE LEVELS OF CHILDREN ON READING AND WRITING IN FOUNDATION SKILL ASSESSMENT

Definition
The percentage distribution of students in (A) grade 4, (B) grade 7 who meet or exceed expectations on reading and writing in the British Columbia annual provincial Foundation Skills Assessment (FSA).

Source
Ministry of Education, British Columbia.

Rationale
Reading and writing achievement is one component of academic performance which, measures the overall knowledge and capabilities of a student. Academic performance is highly correlated with nutrition, stable housing, family functioning, self-esteem, educational attainment of parents, and socioeconomic status. Academic performance is an indicator of a student's readiness to acquire more skills and knowledge, and thus to proceed to higher grade levels. The assessment of reading and writing achievement at the provincial and national level can provide a basis for examining social-class gradients and sex differences in academic performance.

Nature of Benchmark
To be developed.

1.3.11 CHILDREN TAKING PART IN PHYSICAL ACTIVITY

Definition
The number of male and female students in grade seven who answered "three or more days" in response to the question: "On how many of the past seven days did you exercise or participate in sports activities that made you sweat and breathe hard, such as basketball, jogging, fast dancing, swimming laps, tennis, fast bicycling or similar aerobic activities?"; expressed as a percentage of all grade seven's who filled out the questionnaire.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS); WHO Europe Region, *The Health of Youth 1996*.

Rationale
Regular physical exercise increases a person's ability to perform daily activities with greater vigor, and may reduce the risk of specific health problems, including coronary heart disease, hypertension, non-insulin-dependent diabetes, colon cancer, depression, and premature mortality.

Nature of Benchmark
National average.

1.3.12 CHILDREN WHO LOOK FORWARD TO SCHOOL

Definition
Number of parents of children age 6 to 11 years who answered "often" or "always" in response to the question: "With regard to how your child feels about school, how often does he/she look forward to going to school?"; expressed as a percentage of all parents of children in this age group surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY).

Rationale

The education system and how children in Canada are performing in school is commanding a great deal of attention from parents, businesses, media and governments. However, if children dread going to school, this creates a stressful situation, which may influence children's learning, as well as their overall mental and physical health and well-being.

Nature of Benchmark
Jurisdictional best performance - national.

1.3.13 CHILDREN WHO ARE CARIES IMMUNE

Definition
Number of kindergarten age children who have never experienced tooth decay expressed as a percentage of all children screened.

Source
Dental Health Services, Ministry of Health Services, 2001.

Rationale
Dental disease is very common in children. It is associated with poor oral hygiene, inadequate nutrition and/or bad eating habits.

Nature of Benchmark
Target.

OUTCOME OBJECTIVE 1.4 To Optimize the Health and Well-Being of Youth

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Mortality rate for youth (15-18) Per 1,000 cohort population.	0.57	0.46	0.55	0.39	0.49	0.55	NF 0.3 (1995)	↑[5]
2. Sexually transmitted disease rates for youth (15-19): (A) gonorrhea (B) chlamydia (C) syphilis, (D) PID Per 100,000 cohort population	(A) 23.2 (B) 511.3 (C) 0.37 (D) 70.4	(A) 19.9 (B) 445.0 (C) 0.0 (D) 80.4	(A) 18.7 (B) 439.7 (C) 0.0 (D) 73.5	(A) 1.7 (B) 457.3 (C) 2.6 (D) 54.9	(A) 29.6 (B) 574.7 (C) 2.6 (D) n/a	(A) 24.4 (B) 662.5 (C) 1.1 (D) n/a	Canada (A) 45.2 (PEI 0.0) (B) 574.4 (C) 0.4 (1999) (D) 63.2 (1996/97)	(A) ↓ (B) ↓[5] (C) ↓[5] (D) ↑
3. Rate of HIV infection among youth Per 100,000 15-19 years olds	1.65	4.33	1.15	1.51	2.25	2.59	Canada 1.5 (1995)	↓
4. Rate of AIDS contraction among youth Per 100,000 15-19 years olds	0.41	0.39	0.0	0.0	0.0	0.0	Canada 0.1	↑
5. Percentage of students in good health	86 (1992)			85			Canada 63% (1990)	↓
6. Percentage of children and youth with low self-esteem	12.9 (1994)						Canada 11.8% (1994)	n/a
7. *Percentage of students who are "connected" to family*				87			To be developed	n/a
8. *Percentage of students who are "connected" to school*				87			To be developed	n/a
9. Percentage of youth doing well in numeracy					76	75	To be developed	n/a
10. Percentage of youth doing well in reading					83	80	To be developed	n/a
11. Percentage of youth doing well in writing					n/a	68	To be developed	n/a
12. Percentage of students completing high school	68.6	71.5	71.5	72.2	75.0	75.3	Canada 70 (1994)	↑[5]
13. Percentage of (A) girls (B) boys taking part in physical activity	(A) 65 (B) 82 (1992)			(A) 69 (B) 81			Canada (A) 56 (B) 81 (1993/94)	(A) ↑ (B) ↓

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
14. Percentage of (A) girls (B) boys who wish to lose weight	(A) 58 (B) 17 (1992)			(A) 57 (B) 18			Canada (A) 48 (B) 22 (1993/94)	(A) ↑ (B) ↓

Notes: 1. ***S*** denotes "significant"; 2. ***Trend* represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

1.4.1 YOUTH MORTALITY

Definition
Deaths per 1,000 youth age 15 - 18 years.

Source
BC Vital Statistics Agency; Statistics Canada.

Rationale
Youth mortality is a fundamental measure of health. It can be associated with inadequate nutrition, injury, depression and/or with abuse or neglect. Although the six-year data are presented in the data table, the most recent ten-year data, where feasible, were used in determining the trend. As a result, in some cases, the directions shown in the "trend" column may differ from what one would intuitively conclude through a visual inspection of the data presented.

Nature of Benchmark
Jurisdictional best performance - national.

1.4.2 SEXUALLY TRANSMITTED DISEASE AMONG YOUTH

Definition
Reports per 100,000 youth age 15-19 years.

Source
BC Centre for Disease Control Society, *Sexually Transmitted Disease Control: Annual Report; Canadian Journal of Human Sexuality*, 6(2) (1997). Health Canada, Population and Public Health Branch, *1998/1999 Canadian Sexually Transmitted Diseases (STD) Surveillance Report* .

Rationale
This indicator is a measure of health status as well as adolescent risk-taking behaviour that can lead to poor health outcomes. Indirectly, it is a measure of youth access to sexual health education and birth control methods that protect against sexually transmitted diseases. The sexually transmitted disease rate is also a marker for potential HIV infection. Sexually transmitted diseases are preventable and curable.

Nature of Benchmark
National average.

1.4.3 HIV INFECTION AMONG YOUTH

Definition
Initial positive tests per 100,000 youth age 15-19 years. There are several caveats to the data: 1) the data represent only individuals who have been tested for HIV; 2) the total number of HIV positive tests is not equal to the total number of HIV positive individuals as there may be some duplicate testing; 3) the data are not incidence reports as an HIV positive test report may be from a person who is at any stage in the HIV disease process; 4) it is not correct to add the number of HIV positive tests and the reported AIDS cases to determine the total number of people who are HIV positive and living with AIDS as the same report could be included in both databases; 5) there may be some degree of under-reporting as there is a time delay between the time the HIV test is conducted and when a positive test result reaches Health Canada.

Source
BC Centre for Disease Control Society (2001).

Rationale
HIV/AIDS continues to be an epidemic of concern in this country. In Vancouver, AIDS is the leading cause of Potential Years of Life Lost. Each new case of HIV infection translates into $100,000 to $150,000 direct costs to the health care system (Provincial Health Officer's Annual Report 1996). HIV infection influences life expectancy and quality of life. HIV infection is highly correlated with personal risk behaviours such as injection drug use and unprotected sex. HIV surveillance is essential to monitor more closely the HIV/AIDS epidemic in Canada as HIV testing and diagnosis is usually closer to the time of infection than an AIDS diagnosis.

Nature of Benchmark
National rates.

1.4.4 AIDS CONTRACTION AMONG YOUTH

Definition
Incidence of first diagnosis per 100,000 youth age 15-19 years.

Source
BC Centre for Disease Control Society, STD/AIDS Control, Health Canada, Bureau of HIV/AIDS and STDs.

Rationale
HIV/AIDS continues to be an epidemic of concern in this country. In Vancouver, AIDS is the leading cause of Potential Years of Life Lost. Each new case of HIV infection translates into $100,000 to $150,000 direct costs to the health care system (Provincial Health Officer's Annual Report 1996). HIV/AIDS influences life expectancy and quality of life. Data suggest that, based on the evidence that diagnosis for AIDS increases drastically in early adulthood, AIDS contraction is associated with high-risk behaviours common in adolescence. This can be attributed to the relatively long period between HIV infection and the onset of AIDS symptoms.

Nature of Benchmark
National total.

1.4.5 STUDENTS WITH GOOD HEALTH STATUS

Definition
The number of students in grades 10 through 12 who answered "excellent" or "very good" (as opposed to "good", "fair" or "poor") to the question; "In general, how would you describe your health?", expressed as a percentage of all students in grades 10 through 12 who answered the question.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS); Canada's Health Promotion Survey.

Rationale
How people perceive their own health is an important measure to consider when assessing the health of an individual or a population. A number of studies have shown that self-rated health is indicative of both physical health and social well-being.

Nature of Benchmark
National average.

1.4.6 CHILDREN AND YOUTH WITH LOW SELF-ESTEEM

Definition
The number of respondents 12-19 years who scored 16 or less on a single scale of self-esteem expressed as a percentage of all respondents in the 12-19 age group. The scale has a range of 0-24 with higher scores indicating greater self-esteem.

Source
National Population Health Survey (NPHS) 1994.

Rationale
Young people, particularly young females, are seen to be most at risk in terms of emotional health. Among youth, stress and feelings of loneliness are common. The literature suggests that a positive sense of self influences a youth's ability to participate in and achieve desirable things in life and even one's immune and endocrine systems.

Nature of Benchmark
National average.

1.4.7 STUDENTS WHO ARE "CONNECTED" TO FAMILY

Definition
Number of students who are classified as having a medium and/or high level of connectedness with family as a percentage of all students surveyed. Connectedness is a term used to describe how youth feel about their social environment, including their family and school. Connectedness to family is assessed based on a set of questions, including whether the youth feel close to their parents, whether their parents care for them, and understand them etc. Student responses are turned into composite index scores representing their overall connectedness to family.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS)

Rationale
Connections to family are important contributors to good health. Several researchers have found that a young person's sense of caring and connection to others has a strong impact on physical and emotional health. As well, connectedness with family seems to promote resilience and to protect against risks during the teenage years.

Nature of Benchmark
N/A

1.4.8 STUDENTS WHO ARE "CONNECTED" TO SCHOOL

Definition
Number of students who are classified as having a medium and/or high level of connectedness with school as a percentage of all students surveyed. Connectedness to school is assessed based on a set of questions, including whether the youth feel their teachers care for them, whether they get along with their peers. Student responses are turned into composite index scores representing their overall connectedness to school.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS)

Rationale
Connectedness with family is an important contributor to good health. Several researches have found that a young person's sense of caring and connection to others has a significant impact on physical and emotional health. As well, connectedness with family are found to promote resilience and to protect against risks during the teenage years.

Nature of Benchmark
N/A

1.4.9. PERFORMANCE LEVELS OF YOUTH ON NUMERACY IN FOUNDATION SKILL ASSESSMENT

Definition
The percentage distribution of students in Grade 10 who meet or exceed expectations on numeracy in the annual British Columbia provincial Foundation Skills Assessment.

Source
Ministry of Education, British Columbia.

Rationale
Numeracy achievement is one component of academic performance, which, in turn, measures the overall knowledge, and capabilities of a student. Academic performance is highly correlated with nutrition, stable housing, family functioning, self-esteem, educational attainment of parents, and socioeconomic status. Academic performance is an indicator of a student's readiness to acquire more skills and knowledge, and thus to proceed to higher grade levels.

Nature of Benchmark

N/A

1.4.10. PERFORMANCE LEVELS OF YOUTH ON READING IN FOUNDATION SKILL ASSESSMENT

Definition
The percentage distribution of students in Grade 10 who meet or exceed expectations on reading in the annual British Columbia provincial Foundation Skills Assessment.

Source
Ministry of Education, British Columbia.

Rationale
Numeracy achievement is one component of academic performance, which, measures the overall knowledge, and capabilities of a student. Academic performance is highly correlated with nutrition, stable housing, family functioning, self-esteem, educational attainment of parents, and socioeconomic status. Academic performance is an indicator of a student's readiness to acquire more skills and knowledge, and thus to proceed to higher grade levels.

Nature of Benchmark
N/A

1.4.11. PERFORMANCE LEVELS OF YOUTH ON WRITING IN FOUNDATION SKILL ASSESSMENT

Definition
The percentage distribution of students in Grade 10 who meet or exceed expectations on writing in the annual British Columbia provincial Foundation Skills Assessment.

Source
Ministry of Education, British Columbia.

Rationale
Numeracy achievement is one component of academic performance, which measures the overall knowledge, and capabilities of a student. Academic performance is highly correlated with nutrition, stable housing, family functioning, self-esteem, educational attainment of parents, and socioeconomic status. Academic performance is an indicator of a student's readiness to acquire more skills and knowledge, and thus to proceed to higher grade levels.

Nature of Benchmark
N/A

1.4.12 STUDENTS WHO COMPLETE HIGH SCHOOL

Definition
The number of current Grade 12 students who completed high school expressed as percentage of the number Grade 8 students 4 years earlier.

Source
BC Ministry of Education

Rationale
Graduating from high school is critical for obtaining post-secondary education. Youth who do not complete high school face enormous challenges in achieving financial success. Over their lifetime, high school dropouts will earn significantly less and face much higher rates of unemployment than high school graduates and college or university graduates.

Nature of Benchmark
National average.

1.4.13 YOUTH TAKING PART IN PHYSICAL ACTIVITY

Definition
The number of male and female students age 15 years who answered three or more days in response to the question, "On how many of the past seven days did you exercise or participate in sports activities that made you sweat and breathe hard, such as basketball, jogging, fast dancing, swimming laps, tennis, fast bicycling or similar aerobic activities?", expressed as a percentage of all 15 year old male/female students who filled out the questionnaire.

Source

McCreary Centre Society, *Adolescent Health Survey* (AHS); WHO Europe Region, *The Health of Youth 1996.*

Rationale
Regular physical exercise increases a person's ability to perform daily activities with greater vigor, and may reduce the risk of specific health problems, including coronary heart disease, hypertension, non-insulin-dependent diabetes, colon cancer and depression, as well as all-cause mortality rates.

Nature of Benchmark
National average.

1.4.14 STUDENTS WHO WANT TO LOSE WEIGHT

Definition
Number of 15 year old girls and boys trying to lose weight expressed as a percentage of all those in the same age category surveyed.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS); WHO Europe Region, *The Health of Youth 1996.*

Rationale
This measure is an indicator of the extent to which youth are dissatisfied with their body image and are at risk of adopting unhealthy approaches to weight control. The overemphasis on thinness during adolescence may contribute to eating disorders such as anorexia nervosa and bulimia.

Nature of Benchmark
National average.

OUTCOME OBJECTIVE 1.5 To Optimize the Health and Well-Being of Families with Children

Indicator	1994	1996	1997	1998	1999	2000	Benchmark	Trend
1. Percentage of children living in healthy functioning families	92.1	93.2		92.3			NFD 95.6%	◆
2. Percentage of parents with; (A) nurturing supports (B) emergency personal supports	(A) 94.7 (B) 97.2			(A) 97.9 (B) 98.6			(A) PEI 98.4 (B) NS 99.4 (1998)	(A) ↑ (B) ↑
3. Percentage of children whose parents have positive interactions with them	86.7	91.5		89.4			NB 92.8% 1998	↓
4. Percentage of children whose parents practice consistent parenting	71.5	74.4		77.3			PEI 75.5% (1998)	↑
5. Percentage of children whose parents indicate alcohol consumption is a domestic problem	8.1	5.1		7.2			Que 3.3% (1998)	↓
6. Percentage of children whose parents maintain a non-violent home	92.2	90.8		91.3			NB 93% (1998)	↑
7. *Spousal Assault rates Per 1,000 population*	2.48	2.49	2.51	2.43	2.45	2.48	To be developed	↑[S]

Notes: 1. ***S*** denotes "significant"; 2. ***Trend* represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

1.5.1 HEALTHY FUNCTIONING FAMILIES

Definition

Number of children age 0-11 years determined to be living in healthy functioning families expressed as a percentage of all children surveyed. Family functioning was determined using the same scale as the *Ontario Child Health Study* which asked parents of children age 0 to 11 years 12 questions focusing on six activities that reflected how well the family worked together; problem solving, communication, roles, emotional responsiveness, emotional involvement and behaviour control. Answers to the questions were combined and assigned a score between 0 and 35. This score was then compared to a scale according to which families who scored between 0 and 14 were considered "healthy functioning" and over 15 was considered "dysfunctional".

Source

National Longitudinal Survey of Children and Youth (NLSCY), 1998.

Rationale
The family unit is the primary environment for young children. As such, the quality of this environment (e.g. family functioning) will have major effects on the health and well being of all family members. The Ontario Child Health Study found a significant association between family dysfunction and mental health problems among children. Those children who demonstrated problems in their relationships were more likely to live in families that were classified as dysfunctional than in families considered functional.

Nature of Benchmark
Jurisdictional best performance - national.

1.5.2 SOCIAL SUPPORT FOR PARENTS

Definition
Number of parents of children age 0-11 years who "agreed" or "strongly agreed" with a number of statements regarding social supports expressed as a percentage of all parents surveyed. These indicators were not part of *National Longitudinal Survey of Children and Youth* (NLSCY) conducted in 1996.

Source
National Longitudinal Survey of Children and Youth (NLSCY) 1998.

Rationale
Social support assists parents to cope with the everyday stresses of raising children and may help to defuse problems before they reach crisis proportions. A parent's social support system can make child rearing easier.

Nature of Benchmark
Jurisdictional best performance - national.

1.5.3 PARENTS WHO HAVE 'POSITIVE INTERACTIONS' WITH THEIR CHILDREN

Definition
Number of children age 2-11 years whose parents were rated as practicing "positive interactions" with them expressed as a percentage of all children surveyed. Parents were asked several questions concerning their interaction with their children. Results of the questions were combined to produce a standardized score ranging between 0 and 20, with 0 being "low positive interaction" and 20 being "high positive interaction". A score of 10 or more is reported here as indicative of positive interaction.

Source
National Longitudinal Survey of Children and Youth (NLSCY), 1998.

Rationale
Parental factors and the quality of interaction between parents and children have been found to contribute significantly to both positive and negative outcomes for children. The positive things parents do with their children have a major influence on their development. Parenting problems, on the other hand, have been recognized as critical to the development of childhood disorders, especially conduct disorders.

Nature of Benchmark
Jurisdictional best performance -national.

1.5.4 PARENTS WITH 'CONSISTENT' PARENTING PRACTICES

Definition
The number of parents of children age 2 to 11 years who were rated as practicing "consistent" parenting with their children expressed as a percentage of all parents of children of these ages who were surveyed. Parents were asked several questions concerning consistency of their parenting style. Results of the questions were combined to produce a standardized score ranging between 0 and 20, with 0 being "not consistent" and 20 being "very consistent". Consistent parenting practices are reported here as scores of 14 or more.

Source
National Longitudinal Survey of Children and Youth (NLSCY), 1998.

Rationale
Quality parenting, of which consistency is a component, is seen as a protective factor which can contribute to resilience in children. Protective factors provide a buffer, as well as a reservoir of resources, to deal effectively with stress; they therefore result in positive developmental outcomes such as school completion (NLSCY, 1996). Consistency of parenting practices is

seen to help children understand the expectations their parents have of them. Parenting practices have been linked with children's formation of social relationships and with helping behaviour.

Nature of Benchmark
Jurisdictional best performance - national.

1.5.5 PARENTS WHO INDICATE THAT DRINKING IS A PROBLEM IN THE HOME

Definition
Number of children age 0-11 years whose parents "agreed" or "strongly agreed" that drinking is a source of tension or disagreement in the home expressed as a percentage of all children surveyed.

Source
National Longitudinal Survey of Children and Youth (NLSCY).

Rationale
When drinking is a source of tension or disagreement in the home, the home environment is negatively impacted. It is likely that at least one person in the home has a drinking problem. Children exposed to inappropriate alcohol consumption in the home are at increased risk of alcohol misuse themselves.

Nature of Benchmark
Jurisdictional best performance - national.

1.5.6 PARENTS WHO PROVIDE A NON-VIOLENT HOME

Definition
The inverse of the number of parent respondents of children age 2 to 11 years who indicated that their child sees adults or teenagers physically fighting or otherwise trying to hurt each other either seldom, sometimes or often, divided by all parents of children age 2 to 11 years who were surveyed, expressed as a percent.

Source
National Longitudinal Survey of Children and Youth (NLSCY) 1998.

Rationale
Exposure to violence in the home increases the likelihood that children will act out violently, both as children and adults. It may be associated with abuse and may negatively impact upon a child's self-esteem and sense of stability.

Nature of Benchmark
Jurisdictional best performance - national.

1.5.7 PREVALENCE OF SPOUSAL ASSAULT

Definition
The number of spousal assaults as recorded by the Police Services Division per 1,000 population.

Source
Police Services Division, British Columbia Ministry of Public Safety and Solicitor General

Rationale
Exposure to domestic violence in the home increases the likelihood that children will act out violently, both as children and adults. It may be associated with abuse and may negatively impact upon a child's self-esteem and sense of stability.

Nature of Benchmark
Jurisdictional best performance - national.

OUTCOME OBJECTIVE 1.6 To Reduce Teen Pregnancy

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Teen pregnancy rate Per 1,000 (15-19) population	52.2	48.6	44.2	42.9	39.9		Canada 20.19 (1997) Switzerland, Japan 4 Sweden 10 (1995)	↑[S]
2. Teen birth rate Per 1,000 (15-18) female population	16.3	13.8	12.9	11.9	11.3	10.4	AL 5.0 (1999) NB 44.9 (1997) Canada 4.2 (1998)	↑[S]
3. Percent sexually active female youth using contraception	76 (1992)			78			Canada 74 (1992)	↑

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends.**

NOTES ON INDICATORS

1.6.1 TEEN PREGNANCY RATE

Definition
Total numbers of live births, stillbirths, induced abortions, and miscarriages requiring hospitalization per 1,000 females age 15-19 years.

Source
BC Vital Statistics Agency; Canadian Institute of Child Health, *Health of Canada's Children 1994;* Health Statistics Division, Statistics Canada; United Nations, *Demographics Yearbook 1991;* Statistics Canada, *Births to Mothers (Canada);* Government of Alberta, *1999/2000 Annual Report: Measuring Up.*

Rationale
Teen pregnancy has far-reaching consequences for both the mother and child. Mothers face higher risks of complications in childbirth and their infants are at greater risk of prematurity, low birth weight, death in the first year of life, and developmental problems. Becoming pregnant at too early an age can distort a young woman's own development, limiting her education and life opportunities.

Nature of Benchmark
Jurisdictional best performance - national/ international and national average.

1.6.2 TEEN BIRTH RATE

Definition
Number of live births by 15-18 year old teens per 1,000 females age specific group.

Source
BC Vital Statistics Agency; Alberta Municipal Affairs, *Vital Statistics Annual Review 1995*; UNICEF, *Progress of Nations 1998.*

Rationale
Teen parenthood is a predictor of future economic hardship for both parent and child. In addition to poor pregnancy outcomes, mothers who are children themselves are less likely to finish high school, and are far more likely to be poor and welfare dependent than those giving birth at later ages. Children born to teen mothers are more likely to be economically disadvantaged as children and adults.

Nature of Benchmark
Jurisdictional best performance - national/ international and national average.

1.6.3 SEXUALLY ACTIVE FEMALES USING CONTRACEPTION

Definition
Students were asked, "The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?" The baseline figure is the number of females in grades seven through 12 who reported using some form of birth control (i.e. birth control pills, condoms or some other method excluding withdrawal) the last time they had sexual intercourse expressed as a percentage of all female students in grades seven through 12 who reported being sexually active. The benchmark is derived from a survey of 660 females 15 to 18 years living in three Canadian cities. Sexually active respondents were asked to indicate which types of birth control they used. The figure reported here is the inverse of the percentage of sexually active respondents who reported that they were not using any form of birth control.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS); Canadian Institute for Child Health, *The Health of Canada's Children 1994*.

Rationale
Unprotected sex can lead to sexually transmitted diseases and/or unintended pregnancy which can adversely affect the health and well being of teens and their babies.

Nature of Benchmark
National average.

OUTCOME OBJECTIVE 1.7 To Reduce Substance Abuse by Children and Youth

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Percentage of children and youth who smoke: (A) males (B) females	(A) 8 (B) 10 (1992)			(A) 13 (B) 19			SK 11.9 (1994) Canada 10 (1994)	(A) ↓ (B) ↓
2. Percentage of students who drink alcohol regularly: (A) male (B) female	(A) 33 (B) 32 (1992)			(A) 38 (B) 38			(1993/94) Canada (A) 25 (B) 19	(A) ↓ (B) ↓
3. *Percentage of youth reporting ever used marijuana*	25 (1992)			40			(Can 25.4 % (1994)	↓
4. Rate of alcohol-related death among children and youth: (A) direct (B) indirect Per 100,000 15-18 years olds	(A) 0.0 (B) 5.2	(A) 0.5 (B) 4.9	(A) 0.5 (B) 3.3	(A) 0.0 (B) 1.9	(A) 0.0 (B) 4.2	(A) 0.0 (B) 1.8	(A) 0.0 NF, PEI, NS, MA, YK, NWT (1995)	(A) ↕ (B) ↓
5. Rate of drug-induced death among children and youth Per 100,000 15-18 years olds	1.5	2.9	2.4	2.8	0.9	1.8	NF, PEI, NS, NB, Yukon, NWT 0.0 (1995)	↓

Notes: 1. ***S*** denotes "significant"; 2. ***Trend* represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

1.7.1 STUDENTS WHO SMOKE REGULARLY

Definition
Number of children and youth age 10-19 years who currently smoke on a regular basis (daily and non-daily) expressed as a percentage of the total population this age.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS); Health Canada Survey on Smoking in Canada, 1995.

Rationale
The effect of tobacco use on health is well known, yet experimentation with smoking is occurring at younger and younger ages and initiation of smoking now occurs almost entirely during the adolescent years. Therefore, preventing the initiation of smoking and other tobacco use remains an important priority.

Nature of Benchmark
Jurisdictional best performance - national.

1.7.2 STUDENTS WHO DRINK REGULARLY

Definition

The baseline data are the number of male and female students in grade 10 who reported that they had had at least one drink on three or more days in the past 30 days expressed as a percentage of all male/female grade 10 students who filled out the questionnaire. The benchmark reports the same information but for 15 year olds.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS); WHO Europe Region, *Health of Youth 1996.*

Rationale
Alcohol use by adolescents, particularly heavy use, has been conclusively linked to motor vehicle accidents and deaths, physical fights, destroyed property, academic problems, job difficulties, and troubles with law enforcement officials.

Nature of Benchmark
National average.

1.7.3 YOUTH SUBSTANCE ABUSE AND MISUSE

Definition
Percentages of respondents in Grades 7-12 in the Adolescent Health Survey who reported abuse/misuse of tobacco, marijuana and alcohol.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS), 1992 and 1998. Health Canada, *Canada's Alcohol & Other Drug Survey (CADS) 1994: A Discussion of the Findings*

Rationale
Mind-altering and addictive substances have been shown to jeopardize physical, mental and social development during the formative years of adolescence and to endanger the successful transition from school to workforce.

Nature of Benchmark
National Percentage.

1.7.4 ALCOHOL-RELATED DEATHS OF CHILDREN AND YOUTH

Definition
Alcohol-related deaths per 100,000 children and youth age 15-18 years.

Source
BC Vital Statistics Agency; Statistics Canada.

Rationale
Death related to alcohol misuse is avoidable or at least premature. Alcohol-related death is associated with low self-esteem, health risk behaviour, alienation from home and school, and peer group affiliation.

Nature of Benchmark
Jurisdictional best performance - national.

1.7.5 DRUG-INDUCED DEATHS OF CHILDREN AND YOUTH

Definition
Deaths per 100,000 children and youth age 15-18 years.

Source
BC Vital Statistics Agency; Statistics Canada.

Rationale
Drug-induced deaths may be accidental, intentional and/or related to risk behaviors. In all cases, such deaths are considered premature. Drug-induced deaths are preventable.

Nature of Benchmark
Jurisdictional best performance - national.

OUTCOME OBJECTIVE 1.8 To Reduce Substance Abuse by Adults

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Rate of alcohol-related death among adults: (A) direct (B) indirect per 100,000	(A) 16.1 (B) 53.5	(A) 16.3 (B) 60.0	(A) 13.9 (B) 58.3	(A) 16.0 (B) 57.8	(A) 13.0 (B) 55.6	(A) 10.2 (B) 53.0	(A) 9.3 NS (1995)	(A) ↑S (B) ◆
2. Rate of drug induced death among adults per 100,000	13.7	16.5	17.4	20.7	14.8	9.6	NF 0.7 (1995)	↑S
3. Percentage of adults who are regular heavy drinkers	14 (1994)	14.1		14.8			Canada 14.6% (1998)	◆

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends.**

NOTES ON INDICATORS

1.8.1 ALCOHOL-RELATED DEATHS OF ADULTS

Definition
Deaths per 100,000 adults 19 years of age and over.

Source
BC Vital Statistics Agency; Statistics Canada.

Rationale
Death related to alcohol misuse is avoidable and/or premature.

Nature of Benchmark
Jurisdictional best performance - national.

1.8.2 DRUG-INDUCED DEATHS OF ADULTS

Definition
Deaths per 100,000 adults 19 years of age and over.

Source
BC Vital Statistics Agency; Statistics Canada.

Rationale
Drug-induced deaths may be accidental, intentional and/or related to risk behaviours. In all cases, such deaths are considered premature and preventable.

Nature of Benchmark
Jurisdictional best performance - national.

1.8.3 ADULTS WHO DRINK HEAVILY

Definition
Number of survey respondents 20 years of age and over who consumed five or more drinks on one occasion, 12 times or more in previous year, divided by the total number of survey respondents, expressed as a percent. Note for 1996 and 1998 the frequency was changed to" Two to three times a month or greater"

Source
National Population Health Survey.

Rationale
The misuse of alcohol places adults at risk of health, work and social problems and physical danger. Alcohol misuse is a contributing factor in family breakdown.

Nature of Benchmark
National average.

OUTCOME OBJECTIVE 1.9 To Reduce Suicide by Children and Youth

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Suicide rate per 100,000 for (A) children (10-14) (B) youth(15-18)	(A) 2.4 (B) 9.3	(A) 1.2 (B) 5.9	(A) 3.1 (B) 9.1	(A) 0.8 (B) 7.1	(A) 0.8 (B) 7.0	(A) 1.9 (B) 6.5	(A) NF, PEI, YK, NWT 0.0 (B) YK 0.0 (1995)	(A) ↓ (B) ↑
2. Percentage of students attempting suicide	7 (1992)			7			N/A	◆
3. Percentage of students considering suicide (A) male (B) female	(1992) (A) 13 (B) 20			(A) 10 (B) 17			(1992) QU (A) 4 (B) 0	(A) ↑ (B) ↑

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

1.9.1 SUICIDE RATE FOR CHILDREN AND YOUTH

Definition
Deaths by suicide or self-inflicted injury per 100,000 (A) children age 10-14 years and (B) youth age 15-18 years.

Source
BC Vital Statistics Agency; Statistics Canada.

Rationale
Youth suicide is a fundamental measure of health. It is associated with sexual and emotional abuse, stress, running away from home, unplanned pregnancy, problems with sexual identity, cultural dislocation, unemployment and imprisonment. A high incidence of youth suicide reflects serious inadequacies in family and social supports, health and mental health services, and opportunities for success and well being.

Nature of Benchmark
Jurisdictional best performance - national.

1.9.2 ATTEMPTED SUICIDE BY CHILDREN AND YOUTH

Definition
The number of students in grades seven through 12 who reported that they had attempted suicide one or more times in the past 12 months, expressed as a percentage of all students in grades seven through 12 who filled out the questionnaire.

Source
McCreary Centre Society. *Adolescent Health Survey*. 1998.

Rationale
There has been a steady increase in suicide among youth in Canada over the last 25 years and it is now among the leading causes of death for adolescents. Although much has been written about suicide experiences, little is known about patterns and trends in the general youth population.

Nature of Benchmark
Not yet developed.

1.9.3 PERCENTAGE OF STUDENTS WHO CONSIDER SUICIDE

Definition
The number of males and females in grade eight who answered "yes" to the following question; "During the past 12 months, did you ever seriously consider attempting suicide?", expressed as a percentage of all female/male students in grades eight who filled out the questionnaire. The benchmark data report on basically the same question, however, respondents were 12 to 14 years of age and the time span for consideration was restricted to the past six months.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS); Quebec Child Mental Health Survey, 1992.

Rationale
There has been a steady increase in suicide among youth in Canada over the last 25 years and it is now among the leading causes of death for adolescents. Although much has been written about suicide experiences, little is known about patterns and trends in the general youth population.

Nature of Benchmark
Jurisdictional best performance - national.

GOAL #2: To Protect Children and Youth from Abuse, Neglect and Harm

The second goal, *to protect children and youth from abuse, neglect and harm*, focuses on what happens to children and youth when the family and society fail to provide adequately for them. The indicators for this goal track the incidence of abuse, neglect, exploitation, injury, premature death, and vaccine preventable diseases.

This goal has 3 outcome objectives and a total of 29 measures on 12 indicators.

Highlights

Generally the findings suggest that improvements have been made for a number of the measures. However, continued emphasis is required on this goal and a number of its associated outcome objectives. From the 29 measures presented, the general trend shows improvement for 13 (45%), no discernible change for 12 (41%) and decline on 4 (14%) of the measures.

Progress	Needing Improvement
• There was a slight decline in the number of students who reported having been physically and/or sexually abused. • There have been decreasing rates of death and hospitalization due to unintentional injuries overall, particularly in the areas of transportation and home/residential injuries.	• An increasing number of children are being found to be in need of protection due to domestic abuse or neglect. • Overall, immunization rates are being maintained, but still are below the targets set for the province. This has been highlighted in the Provincial Health Officer's Report, A Report on the Health of British Columbian's Provincial Health Officer's Annual Report 1998, Feature Report: Immunization, 1999, which noted; "we can and must do better" with respect to immunization for infants and preschoolers (page 31). *

* The Ministry of Health Planning has the legislative authority and is the lead ministry responsible for policy and program implementation.

OUTCOME OBJECTIVE 2.1 To Reduce Abuse, Neglect and Harm of Children and Youth

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Rate of domestic child abuse/neglect per 1,000 ages 0-18 population	3.4	4.9	4.8	5.6	6.3	6.4	Can 9.71 (1998)	↓
2. *Percentage of students who have been physically abused:* *(A) male* *(B) female* *(C) all*	(A) 15 (B) 24 (C) 19 (1992)			(A) 13 (B) 20 (C) 17			(A) Alaska 10% (B) Minnesota 5%	(A) ↑ (B) ↑ (C) ↑
3. *Percentage of students who have been sexually abused;* *(A) male* *(B) female* *(C) all*	(A) 4 (B) 21 (C) 12 (1992)			(A) 3 (B) 15 (C) 9			N/A	(A) ↑ (B) ↑ (C) ↑
4. *Percentage of Children in Care adopted*[5]				*32.4*	*29.3*	*21.8*	*To be developed*	*n/a*
5. *Percentage of at-risk children/youth supported to stay at home*					*89*	*90.5*	*89%*	*n/a*

Notes: 1. ***S*** denotes "significant"; 2. ***Trend* represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

2.1.1 RATE OF DOMESTIC CHILD ABUSE/NEGLECT

Definition
Confirmed reports (as defined under the *Child, Family and Community Service Act*) of abuse/neglect per 1,000 children and youth age 0-18 years.

Source
Social Worker System/ Management Information System (SWS/MIS) statistical extract files, Ministry of Children and Family Development. Health Canada, *The Canadian Incidence Study of Reported Child Abuse and Neglect* (CIS), 1998.

Rationale
Children need a safe and nurturing family environment for healthy development. This indicator suggests the extent to which children's security is threatened rather than protected by the adults on whom they are most dependent. Child abuse or neglect can result in physical harm, death or profound developmental and behavioural problems. Abused and neglected children may be at greater risk of delinquent behaviour and of mistreating their own children.

Nature of Benchmark

[5] The recruitment program within the Adoption Branch has focused (since 1999) on increasing the number of children who are legally available for adoption (and who have a plan of care of adoption) who are registered for adoption. Since 1998/99 the number of children registered has increased by 48%, which largely explains the short term downward trend.

National.

2.1.2-2.1.3 STUDENTS REPORTING A HISTORY OF PHYSICAL/SEXUAL ABUSE

Definition
Number of Grade 7-12 students indicated a history of physical and sexual abuse expressed as a percentage of all students surveyed.

Source
McCreary Centre Society, *Adolescent Health Survey* (AHS).

Rationale
Physical and sexual abuses have been linked to a variety of emotional difficulties that can affect people throughout life. Both physical and sexual abuse were found to be correlated with emotional distress and suicide ideation.

Nature of Benchmark
Jurisdictional best performance - international.

2.1.4 PERCENTAGE OF CHILDREN IN CARE ADOPTED

Definition
The percentage of Children In Care with a plan of care of adoption, (and who is legally registered for adoption) who are actually placed for adoption.

Source: British Columbia, Ministry of Children and Family Development

Rationale
One of the goals of child welfare is to secure a safe and permanent home for every child. Adoption is one feature of permanency for Children in Care. The objective of obtaining permanent families for children is important because it provides children with a stable and loving family within which to grow and learn. It also provides children with a sense of belonging and a sense of having roots that provide them with stability and self esteem.

Nature of Benchmark
Yet to be developed.

2.1.5 PERCENTAGE OF AT-RISK CHILDREN / YOUTH SUPPORTED TO STAY AT HOME

Definition
Percentage of children and youth subject to a protection concern that is supported to remain at home (rather than being removed).

Source
British Columbia, Ministry of Children and Family Development

Rationale
Children are believed to be best served by least intrusive measures, e.g. family support. Therefore, rather than bring children into care, supporting children and youth to remain at home is a ministry priority. Evidence demonstrates that MCFD is operating optimally on this indicator, & targets oriented toward monitoring for variance from this optimal performance. There is no expectation that there will be "improvement" on this indicator.

Nature of Benchmark
Jurisdictional best performance - national.

OUTCOME OBJECTIVE 2.2 To Reduce the Occurrence and Spread of Vaccine Preventable Diseases

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Percentage of 2-year olds immunized for:							Targets	
(A) DT	(A) 83.2	(A) 80.7	(A) 81.5	(A) 82.6	(A) 83.5	(A) 83.5	(A) 97	(A) ↑
(B) Pertussis	(B) 82.6	(B) 80.3	(B) 80.8	(B) 82.5	(B) 83.5	(B) 83.5	(B) 97	(B) ↑S
(C) Polio	(C) 84.6	(C) 90.2	(C) 81.5	(C) 82.6	(C) 83.5	(C) 83.5	(C) 97	(C) ↑S
(D) MMR/MR	(D) 92.8	(D) 91.7	(D) 77.5	(D) 81.1	(D) 83.0	(D) 82.4	(D) 97	(D) ↓S
(E) Hib	(E) 82.0	(E) 81.1	(E) 81.0	(E) 81.9	(E) 83.5	(E) 84.7	(E) 97	(E) ↑S
2. Percentage of kindergarten children immunized for:							Targets	
(A) DPT/DT	(A) 93.0	(A) 91.6	(A) 92.5	(A) 90.2	(A) 92.3	(A) 89.6	(A) 99	(A) ↓S
(B) Polio	(B) 93.6	(B) 91.8	(B) 92.7	(B) 90.4	(B) 91.4	(B) 89.6	(B) 99	(B) ↓S
(C) MMR/MR	(C) 94.3	(C) 93.7	(C) 94.0	(C) 91.4	(C) 93.4	(C) 91.3	(C) 99	(C) ↓S
3. Percentage of Grade six students immunized for hepatitis B	93.1	93.0	92.7	92.2	92.0	91.6	Target 97	◆
4. Rate of vaccine-preventable diseases for:							Target	
(A) diphtheria	(A) 0.0	(A) 0.0	(A) 0.0	(A) 0.0	(A) 0.02	(A) 0.0	<1(A) - (C) 0	(A) ◆
(B) tetanus	(B) 0.0	(B) 0.1	(B) 0.1	(B) 0.0	(B) 0.15	(B) 0.02	indigenous cases	(B) ◆
(C) pertussis	(C) 12.0	(C) 25.4	(C) 18.5	(C) 9.0	(C) 13.3	(C) 44.4	(F) 0 indigenous	(C) ↓S
(D) polio	(D) 0.0	(D) 0.0	(D) 0.0	(D) 0.0	(D) n/a	(D) n/a	cases by	(D) ◆
(E) haemophilus influenza B	(E) 0.2	(E) 0.1	(E) 0.1	(E) 0.0	(E) 0.10	(E) 0.17	(H) 0 indigenous	(E) ↑S
(F) measles	(F) 0.4	(F) 1.1	(F) 7.0	(F) 0.1	(F) 0.20	(F) 1.03	during pregnancy	(F) ◆
(G) mumps	(G) 1.0	(G) 1.3	(G) 3.6	(G) 0.5	(G) 0.50	(G) 0.42	(I) 90% reduction in	(G) ◆
(H) rubella	(H) 0.7	(H) 0.5	(H) 0.1	(H) 0.1	(H) 0.07	(H) 0.05	children	(H) ↓S
(I) hepatitis (acute)	(I) 6.4	(I) 6.0	(I) 5.7	(I) 4.8	(I) n/a	(I) 2.75		(I) ↑
(J) Hepatitis (chronic)	(J) 51.0	(J) 52.4	(J) 60.4	(J) 60.6	(J) n/a	(J) 61.7		(J) ↓
per 100,000 population								

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

2.2.1 IMMUNIZATION OF INFANTS

Definition

Percent of children who, by their second birthday, have completed the primary series for immunization, according to the Provincial Immunization Schedule. Rates are based on a one-month sample of children who were two years old in April of each year and for whom child health records (HLTH 182s) were available. Complete data are not available from South Fraser Valley, Simon Fraser, Vancouver, Burnaby, and North Shore. Provincial totals exclude data from these Health Regions. For Measles/Mumps/Rubella, a two-dose schedule was introduced in 1996.

Source

Health Data Warehouse, Ministry of Health Services, 2001, B.C.

Rationale
Proper and timely immunization effectively protects children from a host of debilitating and sometimes deadly childhood diseases. It is also an indicator of parents' knowledge of health risks among young children, and the care and attention that parents pay their children.

Nature of Benchmark
Target - National

2.2.2 IMMUNIZATION OF CHILDREN

Definition
Percent of children who, by the end of kindergarten (school entry) year have received the appropriate number of vaccine doses, according to the Provincial Immunization Schedule. Figures are for the school year ending June each year.

Source
Health Data Warehouse, Ministry of Health Services, 2001, B.C.

Rationale
Proper and timely immunization effectively protects children from a host of debilitating and sometimes deadly childhood diseases. These coverage levels indicate how well these children are protected from vaccine preventable diseases.

Nature of Benchmark
Target - National

2.2.3 HEPATITIS B IMMUNIZATION

Definition
Percent of children, who, by the end of grade six, have received three doses of hepatitis B vaccine during in-school immunization. Figures are for the school year ending June each year.

Source
Health Data Warehouse, Ministry of Health Services, 2001, B.C.
Rationale
Proper and timely immunization effectively protects children from a host of debilitating and sometimes deadly childhood diseases. It is also an indicator of parents' knowledge of health risks among young children, and the care and attention that parents pay their children.

Nature of Benchmark
Target - National

2.2.4 RATE OF VACCINE-PREVENTABLE DISEASES

Definition
Reported cases of vaccine-preventable diseases per 100,000 population. Acute cases of hepatitis B refer to persons recently infected and undetermined cases refer to cases in which blood-work could not determine whether infection was acute or chronic. Distinction between these two categories was not reported previous to 1997.

Source
BC Centre for Disease Control Society, Ministry of Health

Rationale
This indicator is a measure of how well B.C. is able to meet established targets for control of these preventable diseases.

Nature of Benchmark
Target - National

OUTCOME OBJECTIVE 2.3 To Reduce Unintentional Injury and Premature Death of Children and Youth

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Rate of: (A) Death: (B) hospitalization per 100,000 of children and youth due to unintentional injuries	(A) 12.4 (B) 843.1	(A) 11.2 (B) 818.2	(A) 10.8 (B) 749.7	(A) 9.0 (B) 749.4	(A) 9.8 (B) 709.4	(A) 8.5 (B 695.9	(A) ON 8.5 (1995) Canada 11.9 (1997) (B) QU 514.8 (1993)	(A) ↑ˢ (B) ↑ˢ
2. Rate of (A) death (B) hospitalization per 100,000 of children and youth due to transportation-related injuries	(A) 7.68 (B) 217.8	(A) 6.81 (B) 212.4	(A) 7.34 (B) 186.7	(A) 5.87 (B) 181.0	(A) 6.84 (B) 173.3	(A) 5.2 (B) 165.8	(A) NF 4.9 (1995) Canada 6.8 (1996) (B) ON 124.0 (1993)	(A) ↑ˢ (B) ↑ˢ
3. Rate of (A) death (B) hospitalization per 100,000 of children and youth due to fire-related injuries	(A) 0.32 (B) 6.1	(A) 0.10 (B) 7.5	(A) 0.21 (B) 4.5	(A) 0.52 (B) 8.0	(A) 0.10 (B) 6.2	(A) 0.52 (B) 6.0	(A) PEI, NB, MB, YK, NT 0.0 (1995) (B) QU 9.6 (1993)	(A) ↑ˢ (B) ↑ˢ
4. Rate of (A) death (B) hospitalization per 100,000 of children and youth due to non-drowning water-related injuries	(A) 0.11 (B) 3.9	(A) 0.10 (B) 2.3	(A) 0.10 (B) 3.6	(A) 0.10 (B) 2.3	(A) 0.0 (B) 4.4	(A) n/a (B) 2.5	(A) PEI, YK, NWT 0.0 (1995) (B) NF 1.2 (1993)	(A) ↑ (B) ↑ˢ
5. Rate of (A) death (B) hospitalization per 100,000 of children and youth due to home/ residential injuries	(A) 1.9 (B) 249.9	(A) 1.4 (B) 237.8	(A) 1.7 (B) 220.5	(A) 1.7 (B) 220.1	(A) 1.5 (B) 206.2	(A) 1.0 (B) 125.8	N/A	(A) ↑ˢ (B) ↑ˢ
6. Rate per 100,000 of death of children (0-18) from other than natural causes	16.5	14.5	16.1	11.3	12.2	11.7	Canada 17.1 (1997)	↑ˢ
7. Rate of hospitalization due to asthma for children 0-14 years Per 1,000 age cohort	3.2	3.0	2.7	3.0	2.3	2.4	Canada 3.4 (1995-96)	↑ˢ

Notes: 1. ***S*** denotes "significant"; 2. ***Trend*** **represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

2.3.1 UNINTENTIONAL INJURIES AND DEATHS OF CHILDREN AND YOUTH

Definition
Deaths from unintentional injuries per 100,000 children and youth age 0-18 years, using PEOPLE 25, based on calendar year. Hospitalization cases, from unintended injuries per 100,000 children and youth age 0-19 years, using PEOPLE 24. The hospitalization data is fiscal year based i.e. for 1995, 1994/95 fiscal year data is reported.

Source
Office of Injury Prevention, Ministry of Health; BC Vital Statistics; Statistics Canada; Health Canada, *Canadian Injury Data*.

Rationale
Unintentional injury is the leading cause of death and injury for children over the age of one year. Up to 90% of unintentional injuries are preventable. To a great extent, the occurrence of injuries is determined by characteristics of the environment in which children live and play and the products that they use. This indicator is a measure of risk to children's health, and of risk-taking behaviour, especially among youth. It is also a measure of the adequacy of a broad range of public health and accident prevention strategies, including public education, product development and use, community and road design, and prevention and treatment resources.

Nature of Benchmark
Jurisdictional best performance - National.

2.3.2 TRANSPORTATION-RELATED INJURIES AND DEATHS OF CHILDREN AND YOUTH

Definition
Deaths due to transportation-related injuries per 100,000 children and youth age 0-18 years, using PEOPLE 25, by calendar year. Hospitalization cases due to transportation-related injuries per 100,000 children and youth age 0-19 years, using PEOPLE 25, The hospitalization data is fiscal year based i.e. for 1995, 1994/95 fiscal year data is reported.

Source
Office of Injury Prevention, Ministry of Health; BC Vital Statistics; Statistics Canada.

Rationale
Motor vehicle accidents are the leading cause of injury-related death for children over the age of one year and the leading cause of injury-related hospitalization for youth age 15 - 19 years.

Nature of Benchmark
Jurisdictional best performance - National.

2.3.3 FIRE-RELATED INJURIES AND DEATHS OF CHILDREN AND YOUTH

Definition
Deaths due to fire-related injuries per 100,000 children and youth age 0-18 years, using P.E.O.P.L.E 26, by calendar year. Hospitalization cases due to fire related injuries per 100,000 children and youth age 0-19 years, using P.E.O.P.L.E 25. The hospitalization data is fiscal year based i.e. for 1995, 1994/95 fiscal year data is reported.

Source
Office of Injury Prevention, Ministry of Health; BC Vital Statistics; Statistics Canada.

Rationale
Unintentional injuries are the leading cause of death and injury for children and youth and they are 90% preventable.

Nature of Benchmark
Jurisdictional best performance - National.

2.3.4 WATER-RELATED INJURIES AND DEATHS OF CHILDREN AND YOUTH

Definition
Deaths due to water-related injuries per 100,000 children and youth age 0-18 years, using PEOPLE 25, by calendar year. Hospitalization cases due to water related injuries per 100,000 children and youth age 0-19 years, using PEOPLE 25. The hospitalization data is fiscal year based i.e. for 1995, 1994/95 fiscal year data is reported.

Source
Office of Injury Prevention, Ministry of Health; BC Vital Statistics; Statistics Canada.

Rationale
Unintentional injuries are the leading cause of death and injury for children and youth and they are 90% preventable.

Nature of Benchmark
Jurisdictional best performance - National.

2.3.5 HOME OR RESIDENTIAL INJURIES AND DEATHS OF CHILDREN AND YOUTH

Definition
Deaths due to home/residential injuries per 100,000 children and youth age 0-18 years, using PEOPLE 25. Hospitalization cases due to home or residential related injuries per 100,000 children and youth age 0-19 years, using PEOPLE 25. The hospitalization data include total injuries occurring at home whether intentional or unintentional and is fiscal year based i.e. for 1995, 1994/95 fiscal year data is reported.

Source
Health Data Warehouse, Ministry of Health; BC Vital Statistics; Statistics Canada.

Rationale
Unintentional injuries are the leading cause of death and injury for children and youth and they are 90% preventable.

Nature of Benchmark
Not yet developed

2.3.6 DEATH OF CHILDREN FROM OTHER THAN NATURAL CAUSES

Definition
Deaths of children (ages 0-18) due to external causes per 100,000 age cohort population.

Source
Vital Statistics Agency, Ministry of Health Planning.

Rationale
Most of the deaths from external causes are preventable, including motor vehicle traffic accident fatalities, accidental deaths from drowning, poisoning, falls, fire, and deaths from intentional injuries such as suicide and homicide.

Nature of Benchmark
Not yet developed

2.3.7 HOSPITALIZATION OF CHILDREN FOR ASTHMA

Definition
Hospitalization of Children (age 0-14 years) for Asthma, per 1,000 age cohorts.

Source
Information Support, Regional Programs, BC Ministry of Health Services

Rationale
Asthma is a condition, which affects the small airways of the lungs. Childhood asthma is the most common chronic childhood illness in Canada. Statistics Canada reported a four-fold increase in childhood asthma over a 20- year period, with hospital admission data reflecting this increase. The cost to children is paramount, as vital schooling is missed. Asthma is the most common cause of absenteeism in school.

Nature of Benchmark
Not yet developed

GOAL #3: To Support Adults with Developmental or Multiple Disabilities to Live Successfully and Participate in the Community

The third goal is *to support adults with developmental or multiple disabilities to live successfully and participate in the community*. This goal addresses the unique situation of adults with developmental or multiple disabilities who are receiving services from the ministry. At present, there is no practical way to identify among the entire population adults with developmental or multiple disabilities in the province, and hence to measure progress in achieving outcomes for this group. As a result, the indicators for this goal have yet to be developed, which creates a slight inconsistency in the *Framework*. Adults with developmental or multiple disabilities are included in the *Framework* to reflect the ministry's ongoing commitment to this population.

The lack of data on adults with developmental disabilities is significant weakness, which needs to be addressed if this goal is to be adequately monitored.

GOAL #4: To Protect Public Safety

The fourth goal, *to protect public safety*, explores the extent to which the safety and security of British Columbians is affected by youth involvement in criminal activity. This goal is specifically focused on youth 12 - 17 years as defined by the federal *Young Offender's Act*. The indicators for this goal are service-driven which creates a slight inconsistency in the *Framework*.

This goal has one outcome objective and eight measures on two indicators for which 4 (50%) of the measures show improvement, 1 (13%) show decline and 3 (37%) show no measurable change.

Progress	Areas of Concern
• Fewer youth are engaging in violent crimes. • Fewer youth are engaging in non-sexual assault. • Fewer youth are engaging in robbery.	• High percentages of youth that receive custody or community supervision dispositions have had previous contact with the criminal justice system.

OUTCOME OBJECTIVE 4.1 To Reduce Youth Involvement In Crime

Indicator	1995	1996	1997	1998	1999	2000	Benchmark	Trend
1. Rate of youth charged with: (A) violent offenses (B) murder/manslaughter (C) attempted murder (D) sexual offenses (E) non-sexual assault (F) robbery per 1,000 children and youth age 12-17 years	(A) 11.0 (B) 0.07 (C) 0.02 (D) 0.75 (E) 7.30 (F) 2.34	(A) 10.5 (B) 0.04 (C) 0.03 (D) 0.78 (E) 7.39 (F) 2.06	(A) 9.9 (B) 0.06 (C) 0.06 (D) 0.76 (E) 6.83 (F) 2.04	(A) 9.2 (B) 0.02 (C) 0.03 (D) 0.75 (E) 6.66 (F) 1.62	(A) 7.86 (B) 0.02 (C) 0.02 (D) 0.70 (E) 5.83 (F) 1.28	(A) 8.13 (B) 0.03 (C) 0.01 (D) 0.74 (E) 6.40 (F) 0.97	(1993/94) (A) QU 4.0 (B) PEI., NF, NB, YK, NWT 0.0 (C) PEI, NF, NB, YK, NWT 0.0 (D) AB 1.6 (E) QU 4.0 (F) PEI 0.0	(A) ↑S (B) ↑S (C) ↑ (D) ↑ (E) ↑S (F) ↑S
2. Rate of youth incarceration per 1,000 children and youth age 12-17 years	1.05	1.01	0.97	0.94	0.83	0.73	n/a	↑S
3. Percentage of youth who are repeat offenders admitted to: (A) custody (B) community supervision	(A) 97 (B) 61	(A) 98 (B) 61	(A) 97 (B) 69	(A) 96 (B) 72	(A) 95 (B) 69	(A) 95 (B) 73	Canada (A) 76 (1993/94)	(A) ↑S (B) ↓S

Notes: 1. ***S*** denotes "significant"; 2. ***Trend* represents trends of desired improvement, rather than actual data trend. As such, the direction of the arrow might not necessarily be congruent with the actual data trends**; 3. Indicators presented in ***italic*** are new additions.

NOTES ON INDICATORS

4.1.1 YOUTH CHARGED WITH VIOLENT OFFENCES

Definition
Charges per 1,000 children and youth age 12-17 years.

Source
Police Services Division, *Youth Court Statistics*, Ministry of Attorney General; BC STATS, BC.

Rationale
This indicator is a proxy for the extent to which youth are engaging in anti-social, violent and illegal activity. It is not a direct measure since the type of activity, social attitudes towards youth and crime, and police reporting techniques influence the nature and extent to which charges are laid. Violent youth crime is associated with poor community relationships, parental neglect, family dysfunction, criminality in the family, substance abuse by youth, and family poverty.

Nature of Benchmark
Jurisdictional best performance - national.

4.1.2 RATE OF YOUTH INCARCERATION

Definition
Average annual admissions to the Youth Justice Institutional Services per 1,000 children and youth age 12-17 years.

Source
Data Services, Ministry of Children and Family Development

Rationale
This indicator is a proxy for the extent to which youth are engaging in anti-social, violent and illegal activity. It is not a direct measure since the type of activity, social attitudes towards youth and crime, and police reporting techniques influence the nature and extent to which charges are laid. Violent youth crime is associated with poor community relationships, parental neglect, family dysfunction, criminality in the family, substance abuse by youth, and family poverty.

Nature of Benchmark
N/A

4.1.3 YOUTH WHO ARE REPEAT OFFENDERS

Definition
Baseline: Number of youths age 12-17 years who, at time of admission into the correctional system, had had previous contact with Corrections, expressed as a percentage of all children and youth admitted. Benchmark: Number of youth age 12-17 years with a previous conviction upon entering secure custody, expressed as a percentage of all children and youth sentenced to secure custody.

Source
Corrections Branch, Ministry of Attorney General; *Juristat* 15 (16), Dec. 1995.

Rationale
This is a measure of the extent to which youth are adopting illegal lifestyles. It may also be viewed as a measure of Corrections Branch's success in diverting youth from illegal activity.

Nature of Benchmark
National average.

Appendix Overview

The following five appendices contain the following:

Appendix A: This provides several key indicators which provide a context for understanding the health and well being of children and families in British Columbia.

Appendix B: This provides a brief summary of changes made since the first edition of *Measuring Success* in 1997.

Appendix C: This provides a summary of the data sources and reports used in developing the baseline, benchmark and annual measures.

Appendix D: This provides a listing of the thirty-five indicators for which annual data are available to allow regular updates.

Appendix E: This provides a listing of the forty-seven indicators which are available regionally, to allow regional comparisons.

APPENDIX A

Influences on Health and Well-Being

This section examines some of the social and economic influences that shape people's lives, such as demographics, family structure, income, employment and housing. It can be used to provide some context for the preceding Performance Report within which a better understanding of the situations of children and families in British Columbia can be achieved.

Demographics

Indicator	Baseline	As a % of BC Population	Current Year	As a % of BC Population
1. Population 0-18 years of age	966,546 (1997)	24.4%	950,738 (2001)	23.1%
2. Population of children age 0 - 18 years who are of Aboriginal origin	74,541 (1996)	As a % of BC children (0-18) Population 7.8%	84,548 (2001)	As a % of BC children (0-18) Population 8.9%

NOTES ON INDICATORS

1. Population 0-18

Definition
Total BC population under 19 years of age.

Source
Population estimates and projections P.E.O.P.L.E 25. BC Ministry of Finance and Corporate Relations. Data extracted from Health Data Warehouse, BC Ministry of Health Services on June 30, 2001

2. Percentage of 0-18 population of Aboriginal origin

Definition
Total Aboriginal BC population under 19 years of age, estimated based on 1996 Census data

Source
Statistics Canada, 1996 Census; Performance Management & Economic Analysis Section, Ministry of Children and Family Development

Comments
1996 Census population data were used because more recent data on persons of Aboriginal origin were not available. Figure may be distorted by the BC share of residents of 77 First Nations reserves and settlements which were not enumerated in the 1996 Census.

Economic Security

Indicator	Baseline	Current Data
1. Percentage of families living below the low income cut-off (after tax)	15.9% (1995)	15.1% (1998)
2. Percentage of children age 0-17 years living below the low income cut-off (after tax)	15.6% (1995)	10.9% (1998)
3. Unemployment rate All ages (ages15+) Youth (15-24)	10.6% 20.6% (January 1997)	7.9% 14.6% (January 2001)

NOTES ON INDICATORS

1. *Families living below the low-income cut-off (LICO)*

Definition
Refers to economic family units living below the 1992 based low-income cut-off (LICO) as defined by Statistics Canada. LICOs are determined by amount of income (pre-tax) used for necessities, family size, degree of urbanization and change according to the Consumer Price Index.

Source
Customer Tabulation, Survey of labor and Income Dynamics, BC Statistics

2. Children living below the low income cut-off (LICO

Definition
Includes all children under 18 years of age in families living **below** the 1992 –based low income cut-off as defined by Statistics Canada. LICOs are determined by amount of **after-tax** income used for necessities, family size, degree of urbanization and change according to the Consumer Price Index.

Source
BC Statistics

3. Unemployment rates

Definition
The unemployment rate is calculated as the number of unemployed as a percentage of total labor force, which represents both employed and unemployed.

Source
Statistics Canada.

Housing

Indicator	Baseline	Current Data
1. Percent of renter households in core housing need	32.5% (1995)	30.6% (1996)
2. Number of households on waiting list for subsidized housing	10,509 (January 1998)	9,363 (July 2000)

NOTES ON INDICATORS

1. Renter households in core housing need

Definition
Refers to renter core housing need. The average income for these households was $17 500, compared to $46 700 for households not in need.

Source
Ministry of Social Development and Economic Development, Housing Policy Section.

2. Households on waiting list for subsidized housing

Definition
Households on BC Housing's waiting lists.

Source
BC Housing Management.

Child Care

Indicator	Baseline	Current Data
1. Number of licensed day care spaces per 100 children age 0 - 5 years	15.1 (1995)	21.2 (December 1999)

NOTES ON INDICATORS

1. Licensed day care spaces

Definition
Includes government approved day care spaces available for every 100 children under 5 years old.

Source
Ministry of Health, Health Planning Database; Ministry of Children and Family Development, ChildCare Services Team.

Service Use

Indicator	Baseline	Current Data
1. Hospital admissions per 1,000 population 0-4 years 5-14 years 15-19 years	78.8 28.0 58.9 (96-97)	76.49 27.53 56.67 (1998)
2. Rate of children and youth under 19 years not living with parents and receiving income assistance per 1,000 total population this age	2 (December 1997)	1.5 (December 2000)
3. Rate of incarceration per 10,000 youth (12-17 years)	13.3 (1996-97)	12.5 (1997-98)

NOTES ON INDICATORS

1. Hospital admissions

Definition
Total number of hospital admissions per 1000 population for 0-4 years, 5-14 years and 15-19 years, age standardized.

Source
Ministry of Health, Information and Analysis Branch.

2. Children and youth not living at home and receiving income assistance

Definition
Represents the number of children receiving basic BC Benefits as a percent of total children under 19. Youth Works and Welfare to Work participants are included in these figures. Aboriginal people living on reserve, persons with a disability and persons living with a relative are not included.

Source
BC Statistics.

3. Youth incarceration
Definition
Includes youth 12-17 years incarcerated as a rate per 10,000 population.

Source
Canadian Centre for Justice Statistics.

APPENDIX B

Changes Since the First Edition

There have been three major changes to the *Population Outcomes Framework* since it was initially released in 1997. These are:

1. All indicators for which there were no data or only one-year of data available have been deliberately excluded from the *Framework* as they do not allow for trend analysis. The indicators that have been dropped are:

    - percentage of children and youth with low self-esteem;
    - percentage of youth who can talk to their mothers and fathers openly;
    - percentage of children and youth with a disability attending school or being tutored;
    - percentage of youth with a disability who are generally happy;
    - percentage of youth with a disability who A) do not feel lonely or remote; or B) feel lonely or remote only sometimes;
    - percentage of youth with a disability able to take part in physical activities;
    - percentage of youth with a disability who would like to be more active;
    - rate of victimization among children and youth for violent offences;
    - percentage of adults with developmental disabilities who experience community placement breakdowns;
    - percentage of adults with developmental disabilities satisfied with community living arrangements;
    - percentage of adults with developmental disabilities who are employed;
    - percentage of adults with developmental disabilities who participate in volunteer activity; and,
    - percentage of adults with developmental disabilities satisfied with social relationships.
    - Average lengths of stay of adults with developmental or multiple disabilities in tertiary care facilities.

The decision to eliminate these indicators resulted in two outcome objectives which appeared in the initial *Framework*, having absolutely no indicators on which to report in this edition. The outcome objectives are: (1) *to optimize the health and well being of children and youth with disabilities*; and, (2) *to increase the participation of adults with developmental disabilities in the community*. Consequently, these outcome objectives are not presented in this report. The elimination of these outcome objectives and indicators does not mean that they are not of interest to the ministry. Nor does it mean that they are not worth monitoring. It simply means that at the time of publication, there was no identified data source for monitoring performance in these areas over time. The lack of population level data on both children with disabilities and adults with developmental disabilities are particularly noteworthy.

It is anticipated that as the *Framework* is reviewed in the proposed Performance Management Forums that attention will be directed towards identifying data sources that allow for the monitoring of performance in relation to these outcome objectives and indicators.

2. Provincial performance data have, in a few instances, changed since the first edition. This occurs when the data were either erroneously reported in the previous editions, or when the data reported was preliminary in nature and have been changed due to more up-to-date population statistics.

Eleven new indicators have been added to the *Framework*. They are italicized within the tables and include:

- Percentage of young people who are "connected" to family
- Percentage of young people who are "connected" to school
- Spousal Assault rates
- Percentage of youth reporting ever used marijuana
- Percentage of Children in Care (who are legally registered for adoption) adopted
- Percentage of at-risk children/youth supported to stay at home
- Percentage of students who have been physically abused
- Percentage of students who have been sexually abused;
- Rate of child mortality from other than natural causes
- Rate of hospitalization due to asthma for children 0-14 years
- Rate of youth incarceration

In addition, these three measures have been used to replace the older school performance related indictors developed by the Council of Ministers of Education- the latter data is no longer available.

- Percentage of youth doing well in numeracy
- Percentage of youth doing well in reading
- Percentage of youth doing well in writing

APPENDIX C

Data Sources

The Ministry of Children and Family Development strives to provide accurate and reliable data. The majority of data contained in this report have been obtained from surveys, published studies or provincial databases. Each data source has implications for the continued maintenance of the *Population Outcomes Framework*. It is anticipated that as the Framework is implemented, the accuracy and completeness of the data will improve over time.

SURVEYS

A survey is a data collection technique that asks questions of respondents. While many of the surveys used in the Framework have published reports which summarize the results, it is often necessary to request the analysis of specific variables to obtain meaningful provincial or benchmark data.

Provincial Surveys

The Framework draws provincial data from one survey.

- *Adolescent Health Survey*, McCreary Centre Society (1993, 1998)

National and Inter-Provincial Surveys

The Framework draws provincial data and benchmark data from five surveys undertaken at the national, or inter-provincial level:

- *National Longitudinal Survey of Children and Youth* (1994, 1996, 1998)
- *National Population Health Survey* (1994)
- School Achievements Indicators Program (1993, 1994, 1996)
- Canadian Census (1991, 1996)
- Canada's Health Promotion Survey (1990)

These data sources are longitudinal and, theoretically, will provide information on the same variables over time. The cycle for data collection varies from two to five years. Timeliness is an issue with some of the data obtained from these sources. It should be noted that unless the surveys were specifically designed to ensure provincial representation, such as the School Achievements Indicators Program and the Canadian Census, interpretation of data at the provincial level could be problematic.

International Surveys

The Framework draws benchmark data from one survey undertaken at the international level:

- *Health of Youth*, World Health Organization, European Region (1996)

It is an appropriate source for benchmarks as all the data are gathered from developed countries. There is an intention to repeat the survey every four years.

REPORTS

The Framework relies heavily on publications, which draw their data from either operational data, and/or from a variety of secondary sources. The publications that draw heavily upon operational data are used for provincial data in the Framework and will allow performance to be monitored on an

annual fiscal or calendar basis. It should be noted that these data are not immediately available at year-end. Operational data are collected by local health area and aggregated at the regional and provincial level. The reports include:

- *Selected Vital Statistics Indicators and Health Status Indicators, Annual Report 1995, 1996, 1997, 1998,1998,2000, and 2001* (plus subsequent *Quarterly Digests)*, Vital Statistics Agency, BC Ministry of Health Services
- *Sexually Transmitted Disease Control, Annual Report 1994, 1995 and 1996* (plus subsequent *AIDS Update Quarterly Reports*), Centre for Disease Control Society, BC Ministry of Health Sevices
- *AIDS in Canada: Quarterly Surveillance Update*, Health Canada
- *HIV in Canada: Surveillance Report for the period 1985-1995*, Health Canada (1996)
- *Juristat*, Canadian Centre for Justice Statistics, Statistics Canada, Cat 85-002

Published reports that rely primarily on the collection of data from secondary sources were used for benchmarks. These sources provide inter-provincial or international comparisons. They vary in both the frequency of collection and the timeliness of the data.

- *A Report on the Health of British Columbians, Provincial Health Officer's Annual Report 1996*, BC Ministry of Health and Ministry Responsible for Seniors (1997)
- *A Report on the Health and Well-Being of B.C's Children, Provincial Health Officer's Annual Report 1997*, BC Ministry of Health and Ministry Responsible for Seniors (1998)
- *Report on the Health of Canadians*, Federal/Provincial/Territorial Advisory Committee on Population Health (1996)
- *The Progress of Canada's Children 1996 and 1997*, Canadian Council on Social Development
- *Nutrition for Health: An Agenda for Action* (1996)
- *The Health of Canada's Children*, Canadian Institute of Child Health (1994)
- *Profiling Canada's Families*, The Vanier Institute (1994)
- *The Health of Canada's Youth*, Health and Welfare Canada (1992)
- *The State of the World's Children 1996*, UNICEF
- *Causes of Death*, Statistics Canada
- *Poverty Profile 1995*, National Council of Welfare (1997)
- *Oregon Benchmarks 1995 and 1996*, Oregon Progress Board
- *Canadian Profile: Alcohol, Tobacco and Other Drugs, 1997*, Canadian Centre on Substance Abuse/Addiction Research Foundation of Ontario
- *Measuring Up: A Health Surveillance Update on Canadian Children and Youth*, Laboratory Centre for Disease Control, Health Canada (1999)

DATABASES

Databases housed within various BC provincial ministries were used as sources of baseline data and continue to be useful for performance monitoring at the provincial level. It should be noted that most of the data from these sources were not in the required format and needed specific analysis. While some of the sources can provide up-to-date information upon request, most cannot. As these data represent operational data or a collation of data from other sources, there is generally a delay between the occurrence of an activity and when it is recorded in the database.

- Health Data, Warehouse, Ministry of Health Services
- BC Vital Statistics Agency, Ministry of Health Services
- Regional Performance Analysis, Ministry of Health Services
- Inpatient Services, Ministry of Health Services
- Injury and Prevention, Office of Injury Prevention, Ministry of Health Services
- Health Status Registry, BC Vital Statistics Agency, Ministry of Health Services
- Data Services, Ministry of Children and Family Development
- Social Worker System - Management Information Systems (SWS - MIS), Ministry of Children and Family Development
- Uniform Crime Reporting Survey, Ministry of Attorney General
- BC Centre for Disease Control Society, Ministry of Health Services
- BC Statistics and Statistics Canada also provided access to data.

APPENDIX D

Annually Updated Indicators by Data Sources

1.1.1	Infant mortality rate	BC Vital Statistics Agency
1.1.2	Rate of low birth rate babies	BC Vital Statistics Agency
1.1.4	Number of newborns born with FAS or drug withdrawal syndrome or noxious influences transmitted to placenta	BC Vital Statistics Agency
1.1.5	Number of infants testing positive for HIV	Ministry of Health Services, BC Centre for Disease Control Society
1.1.6	Rate of neural tube defects	BC Vital Statistics Agency

1.2.1	Mortality rate for children age 1-4 years	BC Vital Statistics Agency

1.3.1	Mortality rate for children age 5-14 years	BC Vital Statistics Agency
1.3.12	Percentage of young children caries immune	Ministry of Health Services, Dental Program

1.4.1	Mortality rate for youth	BC Vital Statistics Agency
1.4.2	Sexually transmitted disease rates for youth	Ministry of Health Services, BC Centre for Disease Control Society
1.4.3	Rate of HIV infection among youth	Ministry of Health Services, BC Centre for Disease Control Society
1.4.4	Rate of AIDS contraction among youth	Ministry of Health Services, BC Centre for Disease Control
1.4.9	Percentage of students completing high school	Ministry of Education

1.6.1	Teen pregnancy rate	BC Vital Statistics Agency
1.6.2	Teen birth rate	BC Vital Statistics Agency

1.7.3	Rate of direct and indirect alcohol-related death among children and youth	BC Vital Statistics Agency
1.7.4	Rate of drug-induced death among children and youth	BC Vital Statistics Agency

1.8.1	Rate of direct and indirect alcohol-related death among adults	BC Vital Statistics Agency
1.8.2	Rate of drug-induced deaths among adults	BC Vital Statistics Agency

1.9.1	Suicide rate for children and youth	BC Vital Statistics Agency

2.1.1	Rate of domestic child abuse/neglect	Ministry of Children and Family Development, SWS-MIS statistical extract files
2.1.3	Rate of children and youth charged with prostitution-related offenses	Ministry of the Attorney General, Police Services Division, Uniform Crime Reporting Survey

2.2.1	Percentage of 2 year olds properly immunized for; Diptheria/Tetanus, Pertussis, Polio, Haemophilus Influenza B, Measles, Mumps And Rubella	BC Health Data Warehouse, Ministry of Health Services.
2.2.2	Percentage of kindergarten (school entry) children immunized for; Diptheria/Tetanus, Polio, Measles, Mumps And Rubella	BC Health Data Warehouse, Ministry of Health Services.
2.2.3	Percentage of grade 6 students immunized for Hepatitis B	BC Health Data Warehouse, Ministry of Health Services.
2.2.4	Rate of vaccine-preventable diseases for Diptheria, Tetanus, Pertussis, Polio, Haemophilus Influenza B, Measles, Mumps, Rubella, Hepatitis B	BC Centre for Disease Control Society, Ministry of Health Services.

2.3.1	Rate of a) death and b) hospitalization of children and youth due to unintentional injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention
2.3.2	Rate of a) death and b) hospitalization of children and youth due to transportation-related injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention
2.3.3	Rate of a) death and b) hospitalization of children and youth due to fire-related injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention
2.3.4	Rate of a) death and b) hospitalization of children and youth due to water-related injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention
2.3.5	Rate of a) death and b) hospitalization of children and youth due to home/residential injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention

4.1.1	Rate of youth charged with violent offenses	Statistics Canada, Youth Court Statistics
4.1.2	Percent of youth offenders admitted to custody and community supervision who are repeat offenders	Data Services, Ministry of Children and Family Development

APPENDIX E

Regional Data Sources

1.1.1	Infant mortality rate	BC Vital Statistics Agency
1.1.2	Rate of low birth weight babies	BC Vital Statistics Agency
1.1.4	Number of newborns with FAS or drug withdrawal syndrome or noxious influences transmitted to placenta	BC Vital Statistics Agency
1.1.5	Number of infants testing positive for HIV	BC Centre for Disease Control Society
1.1.6	Rate of neural tube defects	BC Vital Statistics Agency
1.1.7	Number of SIDS deaths	BC Vital Statistics Agency

1.2.1	Mortality rate for children age 1-4 years	BC Vital Statistics Agency

1.3.1	Mortality rate for children age 5-14 years	BC Vital Statistics Agency
1.3.8	Percentage of children doing well in math problem solving and math knowledge	Council of Ministers of Education, Report on Mathematics Assessment
1.3.9	Percentage of children doing well in reading and writing	Council of Ministers of Education, Report on Reading and Writing Assessment
1.3.10	Percentage of children taking part in physical activity	McCreary Centre, *Adolescent Health Survey*
1.3.12	Percentage of young children caries immune	Ministry of Health Services, Dental Program

1.4.1	Mortality rate for youth	BC Vital Statistics Agency
1.4.2	Sexually transmitted disease rate for youth	BC Centre for Disease Control Society
1.4.3	Rate of HIV infection among youth	BC Centre for Disease Control Society
1.4.4	Rate of AIDS contraction among youth	BC Centre for Disease Control Society
1.4.7	Percentage of youth doing well in math problem solving and math knowledge	Ministry of Education, Report on Mathematics Assessment
1.4.8	Percentage of youth doing well in reading and writing	Ministry of Education, Report on Reading and Writing Assessment
1.4.9	Percentage of students completing high school	Ministry of Education, Annual Report
1.4.10	Percentage of youth taking part in physical activity	McCreary Centre, *Adolescent Health Survey*
1.4.11	Percentage of students who want to lose weight	McCreary Centre, *Adolescent Health Survey*

1.6.1	Teen pregnancy rate	BC Vital Statistics Agency
1.6.2	Teen birth rate	BC Vital Statistics Agency
1.6.3	Percentage of sexually active females using contraception	McCreary Centre, *Adolescent Health Survey*

1.7.1	Percentage of children and youth who smoke	McCreary Centre, *Adolescent Health Survey*
1.7.2	Percentage of students who drink alcohol regularly	McCreary Centre, *Adolescent Health Survey*

1.7.3	Rate of direct and indirect alcohol-related death among children and youth	BC Vital Statistics Agency
1.7.4	Rate of drug-induced death among children and youth	BC Vital Statistics Agency

1.8.1	Rate of direct and indirect alcohol-related death among adults	BC Vital Statistics Agency
1.8.2	Rate of drug-induced death among adults	BC Vital Statistics Agency

1.9.1	Suicide rate for children and youth	BC Vital Statistics Agency
1.9.2	Percentage of students attempting suicide	McCreary Centre, *Adolescent Health Survey*
1.9.3	Percentage of students considering suicide	McCreary Centre, *Adolescent Health Survey*

2.1.1	Rate of domestic child abuse/neglect	Ministry of Children and Family Development, SWS/MIS files
2.1.2	Percentage of students who have been physically and/or sexually abused	McCreary Centre, *Adolescent Health Survey*

2.2.1	Percentage of 2 year olds properly immunized for; diptheria/tetanus, pertussis, polio, haemophilus influenza B, measles, mumps and rubella	Public Health Nursing, B.C., Ministry of Health Services
2.2.2	Percentage of kindergarten (school entry) children immunized for; diptheria/tetanus, polio, measles, mumps and rubella	Public Health Nursing, B.C., Ministry of Health Services
2.2.3	Percentage of grade 6 students immunized for hepatitis B	Public Health Nursing, B.C., Ministry of Health Services
2.2.4	Rate of vaccine-preventable diseases for diptheria, tetanus, pertussis, polio, haemophilus influenza B, measles, mumps, rubella, hepatitis B (acute/undetermined and carrier/chronic)	BC Centre for Disease Control Society

2.3.1	Rate of a) death and b) hospitalization of children and youth due to unintentional injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention
2.3.2	Rate of a) death and b) hospitalization of children and youth due to transportation-related injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention

2.3.3	Rate of a) death and b) hospitalization of children and youth due to fire-related injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention
2.3.4	Rate of a) death and b) hospitalization of children and youth due to water-related injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention
2.3.5	Rate of a) death and b) hospitalization of children and youth due to home/residential injuries	a) BC Vital Statistics Agency b) Ministry of Health Services, Office of Injury Prevention

4.1.1	Rate of youth diverted from criminal justice system through police-based and formal diversion	Ministry of the Attorney General, Police Services Division and Corrections Branch
4.1.2	Percent of youth offenders admitted to custody and community supervision who are repeat offenders	Ministry of the Attorney General, Police Services Division

***Measuring Success* Feedback Form**

We would like to hear from you, our readers, so that we can maximize the usefulness of this document for planning future editions. Please fill in the following form to let us know how you think we are doing and where improvements can be made. Thank you in advance for your input.

Unless otherwise indicated, please circle the letter to the left of the response.

1. How have you used this edition of *Measuring Success*?
   a) I have not used it yet
   b) information only
   c) trend identification
   d) other (please specify)

_____
_____

2. In general, how comprehensive do you find the collection of outcome indicators for your line of work?

a) Very b) Somewhat c) Indifferent d) Not Very e) Not at All

3. Please identify additional indicators and possible data sources that would be useful to include in the future reports.

Outcome Objective #	Additional Indicator	Source of Indicator (if possible)

4. What type of information are you most interested in finding in this report?

_____
_____
_____

5. How useful did you find the indicators?

a) Very b) Somewhat c) Indifferent d) Not Very e) Not at All

6. What type of benchmark do you think would be most useful?
   a) jurisdictional best performance based on regional standards
   b) jurisdictional best performance based on national standards
   c) jurisdictional best performance based on international standards
   d) other (please specify) _____

7. Should the benchmarks change over time?

☐ Yes ☐ No

8. How would you rate the following aspects of this report?

	Excellent			OK		Poor
a) ease of finding information	1	2	3	4	5	
b) organization / layout		1	2	3	4	5
c) presentation / appearance		1	2	3	4	5
d) overall length		1	2	3	4	5
e) content		1	2	3	4	5
f) clarity of purpose		1	2	3	4	5
g) indicators/measures used		1	2	3	4	5

9. Please use the following space to provide comments about improving the content and/or presentation of the report.

_____

_____

_____

10. What area(s) do you work in?
    a) Ministry of Children and Family Development
    b) other ministry in the BC government (please specify)_____
    c) municipal government
    d) federal government
    e) Regional Health Authorities
    f) school board
    g) community service agency
    h) academic
    i) medical
    j) other (please specify) _____

11. What is your job function?
    a) managerial
    b) program delivery
    c) research
    d) policy development
    e) other (please specify)_____

Optional Information

Please provide the following information if you wish to be kept informed about the review of the *Population Outcomes Framework*.

Name: _____

Position: _____

Address: _____

_____

Email: _____

Please return by mail or fax to:

Ministry of Children and Family Development
Management Services Division
PO Box 9701 STN PROV GOVT
Victoria, BC V8W 9S1
Telephone: (250) 356-7271
Fax: (250) 356-0399

Additional Indicators on Early Childhood Health and Well-Being

-An Addendum to *Measuring Success*

This addendum adds new early childhood development related indicators to the 3rd Edition of *Measuring Success* (http://www.mcf.gov.bc.ca/reports_publications.htm). The new additions fall into 4 categories of indicators relating to early childhood development: Physical Health, Early Development, Family, and Community-Related Indicators

On January 31, 2003, the BC government released *Indicators of Early Childhood Health and Well-being In British Columbia.* This report provides baseline information on the health and well-being of children aged 0 to 6. Under the Federal/Provincial/Territorial Early Childhood Development Framework (September 2001), all provinces and territories (excluding Quebec) agreed to report on a common set of indicators. BC's report also includes some further indicators of interest to this province. This report will raise awareness of the health and well-being of children in BC and publicly demonstrates the BC government's commitment to promoting the health and well-being of children 0 to 6 in this province.

Measuring Success is released annually by the Ministry of Children and Family Development in order to monitor and report the status health and well-being of children, youth and families in BC. *Measuring Success* is well known for its extensiveness as well as its comprehensiveness in covering child, youth and family outcomes and indicators.

The monitoring of the outcomes and indicators allows the Ministry to assess the extent to which its programs, services and strategic approaches are making a difference at the provincial population level.

While the majority of the indicators reported in the newly released Indicators *of Early Childhood Health and Well-being In British Columbia* are found also in *Measuring Success*, there are a few indicators related to children under the age of 6 that are not reported in *Measuring Success.* This addendum contains these additional indicators, which complement *Measuring Success* by adding a few indicators focussed on Status Indian children* These indicators will be incorporated into the 4th edition of Measuring Success, which is currently under development.

* Although there is an interest in the health status and well-being of all aboriginal peoples, consistent and relatively reliable data exist primarily for the Status Indian, who makes up approximately 65% of all British Columbia's Aboriginal population. Therefore, in this document the data on Status Indian are used as close proxy for indicators of the Aboriginal children population-based health outcomes in British Columbia.

I. Physical Health

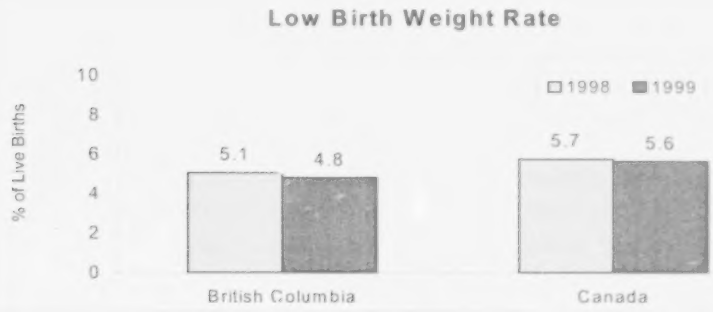
Indicator: Birth Weight

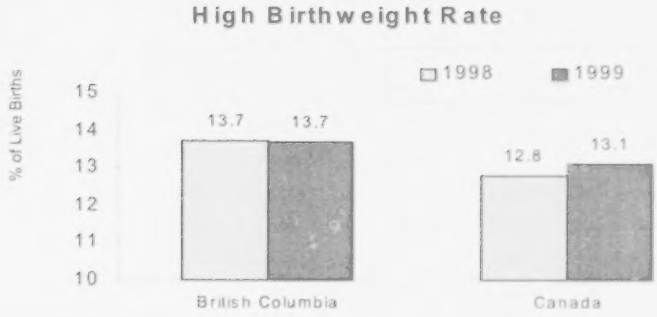
Analysis:

- In 1999, the proportion of low birth weights for BC children was 4.8%, reflecting an improvement from 5.1% in 1998. This is less than the Canadian average of 5.6%.
- In 1998 and 1999 the proportion of BC children born with high birth weight remained static at 13.7%

Rationale:

- Low birth weight is a key determinant of infant survival, health and development. Low birth weight has been linked to infant mortality, physical disability and long term health problems, including heart disease and diabetes.
- High birth weight may increase an infants disposition to certain chronic conditions in adulthood, including obesity, high blood pressure, diabetes and breast cancer.





Definition:

(i) Low Birth Weight is the percentage of live births with a weight less than 2,500 grams.

(ii) High Birth Weight is the percentage of live births with a weight of more than 4,000 grams.

Caveats:
Births with unknown birth weight and births to non-Canadian residents are excluded from both the Low and High Birthweight measures.

Source:
Canadian Vital Statistics – Birth Database (Statistics Canada).

Indicator: Low Birth Weight for Status Indians and the British Columbia General Population

Analysis:

- Over the eight-year period, the Status Indian low birth weight (LBW) rate was 56.1 per 1,000 live births, which was slightly higher than the LBW rate of 50 per 1,000 live births, among the British Columbia general population.
- It is important to note that while the LBW rate of the British Columbia general population has increased over this period, the Status Indian LBW rate shows a decrease.

Rationale:

- Birth weight is a good indicator of the health status of newborns and their subsequent health and well being. Evidence indicates that a birth weight under 2,500 grams poses a risk to the newborn.

Low Birth Weight Rates for Status Indians and BC General Population

year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Status Indians	58.5	57.3	55.8	54.1	60.5	55.8	55.1	52.3	52.4
Others	47.5	47.4	49.7	50.3	52	50.9	52.1	50	47.1
ratio	1.2	1.2	1.1	1.1	1.2	1.1	1.1	1.0	1.1

Definition of Measure:

Low Birth Weight is the percentage of Status Indian live births with a weight less than 2,500 grams. Status Indian is defined as an Aboriginal person who is registered under the *Indian Act* of Canada.

Caveats:

Births with unknown birth weight and births to non-Canadian residents are excluded from both the birth weight measures.

Source:

BC Vital Statistics Agency, Analysis of Status Indians in British Columbia 1991-1999.

Indicator: Pre-Term Birth Rate

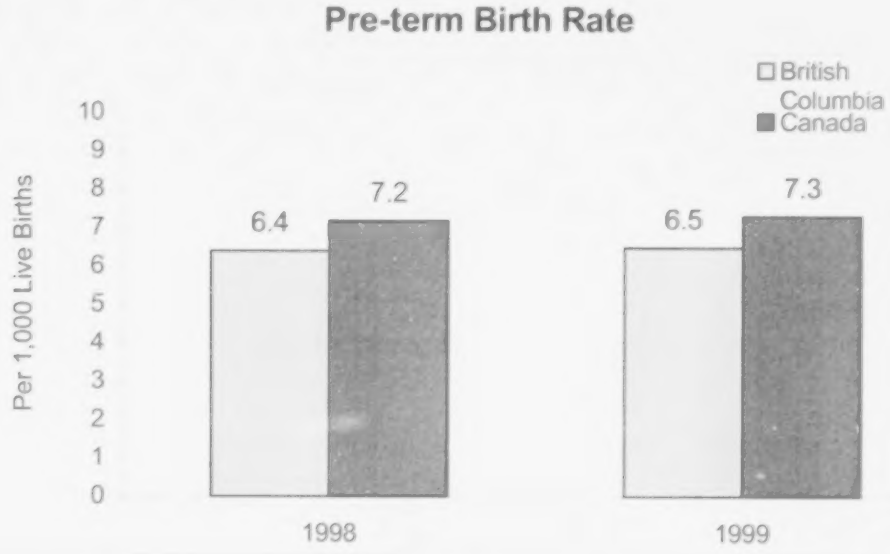
Pre-term Birth Rate for British Columbia and Canada

Analysis:

- In 1999, 6.5 per 1,000 live births of BC births were pre-term, an increase from 6.4 per 1,000 live births in 1998.
- BC has fewer pre-term births when compared to the national average of 7.3 per 1,000 live births for Canada.

Rationale:

- Pre-term birth is associated with higher rates of perinatal illness, neonatal death and long term complications, including disabilities.



Definition of Measure:

The percentage of live births with a gestational age at birth of less than 37 completed weeks (less than 259 days).

Caveats:

Births with unknown gestational age and gestational age less than 20 weeks, as well as births to non-Canadian residents are excluded.

Source:

Canadian Vital Statistics – Birth Database (Statistics Canada).

Indicator: Pre-term Birth Rates for Status Indians and British Columbia General Population

Analysis:

- Over the eight-year period, the average Status Indian pre-term birth rate was 88.7 per 1,000 live births, which was higher than the rate of 60.7 per 1,000 live births for the general British Columbia population. This difference, however, has become less apparent in recent years.

Rationale:

- Pre-term birth babies are associated with higher rate of perinatal illness, neonatal death and long term complications, including disabilities.

Pre-term Birth Rates for Status Indians and BC General Population

year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Status Indians	87.6	86.1	89.6	85	93.6	94.4	87.2	85.9	88.8
Rest of BC	58.4	59.1	58.2	58.9	63.1	62.9	63.3	61.9	60.8
ratio	1.5	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.4

Definition of Measure:

The percentage of Status Indian live births with a gestational age at birth of less than 37 completed weeks (less than 259 days).

Caveats:

Births with unknown gestational age and gestational age less than 20 weeks, as well as births to non-Canadian residents are excluded.

Source:

BC Vital Statistics Agency, 1991-1999.

Indicator: Infant Mortality Rates

Analysis:

- In 1999 the infant mortality rate for BC children was 3.8 per 1,000 live births, which is lower than the national average of 5.3 per 1,000 live births.
- Both male and female infant mortality rates for BC have decreased, which indicates a general improvement in the health of infants in BC.

Rationale:

- Infant mortality is a fundamental measure of child health as well as the well-being of a society. It reflects not only the level of mortality, but also the health status and health care of a population, the effectiveness of preventive care and the attention paid to maternal and child health.

Definition of Measure:

The number of infants who die in the first year of life per 1,000 live births.

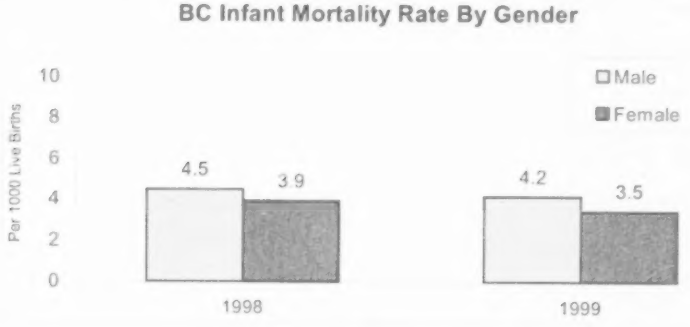
Caveats:

Births to non-Canadian residents are excluded.

Source:

Canadian Vital Statistics – Mortality, Summary List of Causes (Statistics Canada).

Indicator: Infant Mortality Rates for Status Indians and British Columbia General Population



Analysis:

- Overall, there has been a decrease in infant mortality rates among the Status Indian population in the eight–year period, from 14.5 per 1,000 live births in 1991 to 4.6 per 1,000

live births in 1998, which is slightly higher than that of the infant mortality for general British Columbia rate of 4.0 per 1,000 live births in 1998.

- On average, over the eight-year period the infant mortality rate for Status Indians was twice the rate for the general British Columbia population.

Rationale:

- Infant mortality is a fundamental measure of child health as well as the well being of a society. It reflects not only the level of mortality, but also the health status and health care of a population, the effectiveness of preventive care and the attention paid to maternal and child health.

Infant Mortality Rates for BC General Population and Status Indians

year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Status Indians	14.5	15.4	11.7	10.1	14.7	10.3	9	4.6	4.2
Rest of BC	5.8	5.3	5	5.9	5.3	4.6	4.2	4	3.7
ratio	2.5	2.9	2.3	1.7	2.8	2.2	2.1	1.2	1.1

Definition of Measure:

The number of Status Indian infants who die in the first year of life per 1000 live births.

Caveats:

N/A

Source:

BC Vital Statistics Agency, Analysis of Status Indians In British Columbia 1991-1999.

Indicator: Sudden Infant Death Rates for Status Indians and British Columbia General Population

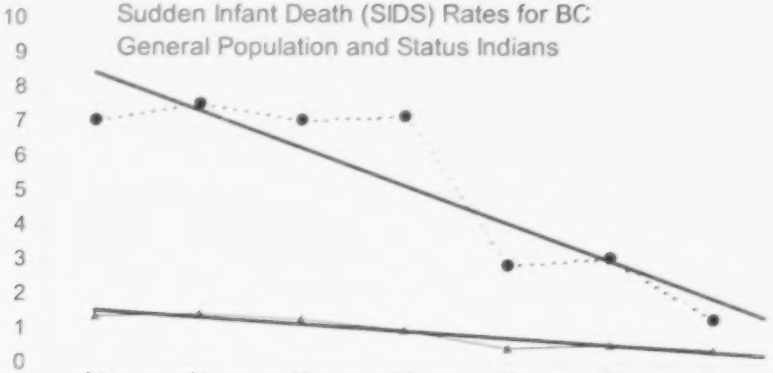
Analysis:

- Sudden Infant Death (SIDS) was the leading cause of infant mortality in the Status Indian population (40% of all Status Indian infant deaths were SIDS related).
- Since 1995 the rate of SIDS among Status Indians has dropped from seven times the British Columbia general population rate to just over three times. However, the smaller Status

Indian population means that this trend is more volatile for Status Indians than for the general population of British Columbia.

Rationale:

- Although the underlying causes of SIDS remain uncertain, research has demonstrated that infants who sleep on their backs have the lowest risk of SIDS. Other factors potentially associated with an elevated risk of SIDS include smoking during pregnancy and exposure to second-hand smoking after birth.



Year	91	91	92	95	96	97	98
Status Indians	7.1	7.6	7.1	7.2	2.9	3.1	1.3
Rest of BC	1.4	1.5	1.3	1	0.5	0.6	0.4
Ratio	5.1	5.1	5.5	7.2	5.8	5.2	3.3

Source: Analysis of Status Indians in British Columbia 1991-1998, BC Vital Statistics Agency

Definition of Measure:

When a Status Indian infant less than one year old dies suddenly, and the cause of death is unknown.

Caveats:

N/A

Source:

BC Vital Statistics Agency, Analysis of Status Indians In British Columbia 1991-1998.

II. Early Development

Indicator: Emotional Health and Social Knowledge and Competence

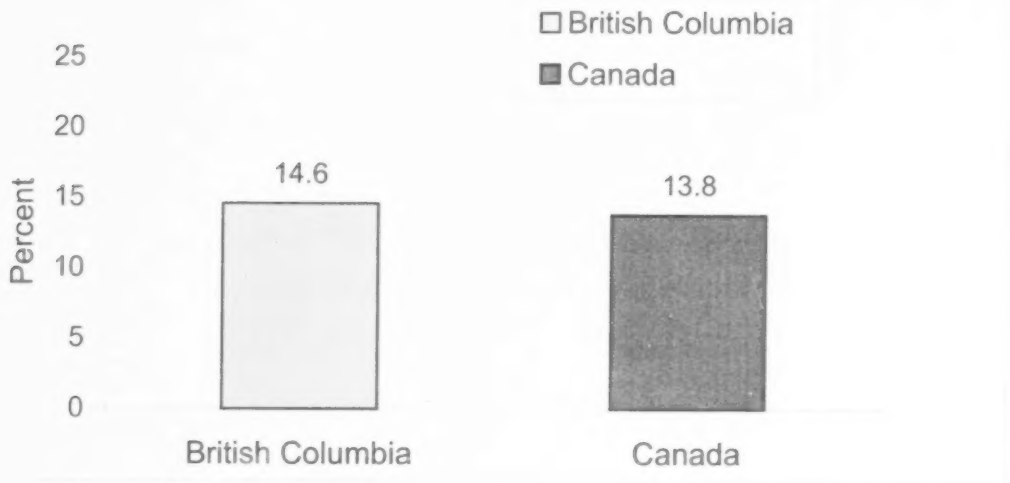
Analysis:

- In 1998/99, 14.6% of BC children had high emotional problems or anxiety, which is slightly higher than the national average of 13.8%.

Rationale:

- Both internal (biological) and external environmental influences impact emotional health. Emotional health is an important component of healthy development because it has both immediate and long term influences on children's outlook on life, social peer interactions and ability to cope.

Children Aged 2-5 Years Who Exhibit High Levels of Emotional and/or Anxiety Problems
(1998/99)



Definition of Measure(s):

(i) Emotional Problem – Anxiety Score is the proportion of children aged 2-5 years who exhibit high levels of emotional and/or anxiety problems.
(ii) Hyperactivity – Inattention Score is the proportion of children aged 2-5 years who exhibit high levels of hyperactivity and/or inattention.
(iii) Physical Aggression Score is the proportion of children aged 2-5 years who exhibit high levels of physical aggression, opposition and/or conduct disorder.

(iv) Prosocial Behaviour Score is the proportion of children aged 2-5 years who exhibit low levels of prosocial behaviour

Caveats:

Children aged 0-1 years, children living in the Territories, children living on reserve and children living in institutions are excluded from all four indicators. As well, children whose actual age at the time of interview was one year have been removed from the Prosocial Behaviour indicator.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada), Cycle 3 (1998/99), Parent Questionnaire.

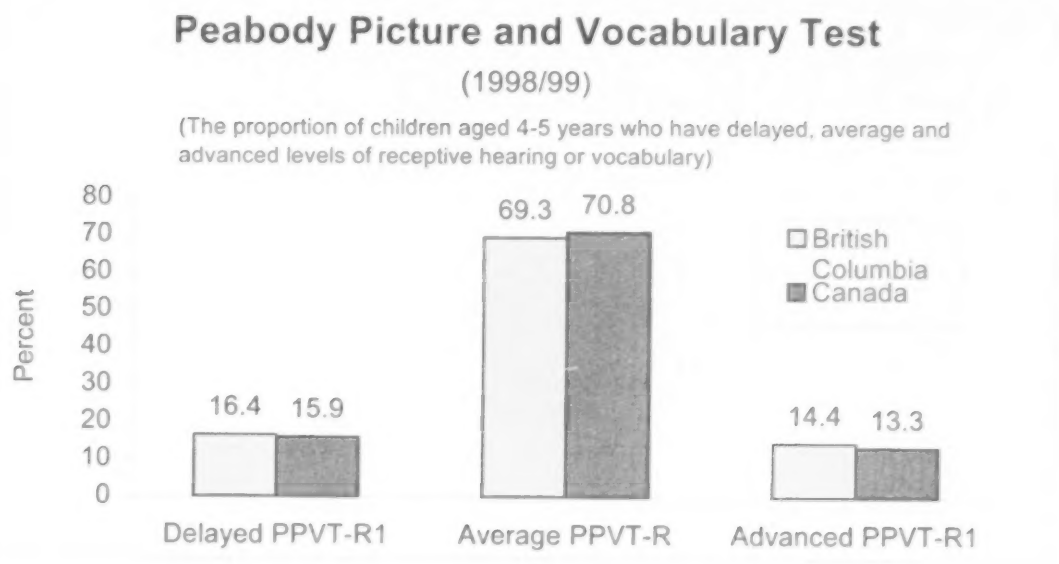
Indicator: Language Skills

Analysis:

- In 1998/99, the proportion of BC children rated as Advanced on the Peabody Picture and Vocabulary Test (PPVT-R Test) (14.4%) was comparable to the national average of 13.3%.
- Generally the rate for BC children scoring Average on the PPVT-R Test (69.3%), is comparable to the national average of 70.8%
- The rate for BC children scoring as Delayed on the PPVT-R Test (16.4%) was also comparable to the national average of 15.9%.

Rationale:

- Verbal skills are one of many measures of "school readiness". If children are equipped with the skills to learn such as verbal ability, learning in the school environment can build on and enhance these skills and prepare them to succeed in education and work.



Additional Indicators on Early Childhood Health and Well-Being 03/01/30

Definition of Measure:

Standard Score for PPVT-R (Peabody Picture and Vocabulary Test – Revised) reflects the proportion of children aged 4-5 years who have delayed, average and advanced levels of receptive hearing or vocabulary.

Caveats:

Children aged 0-3 years, children aged 4-5 years for whom the Person Most Knowledgeable did not provide consent for the PPVT-R to be administered, children living in the Territories, children living on reserve and children living in institutions are not included.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada) Cycle 3 (1998/99), Direct Assessment.

III. Family Related Indicators

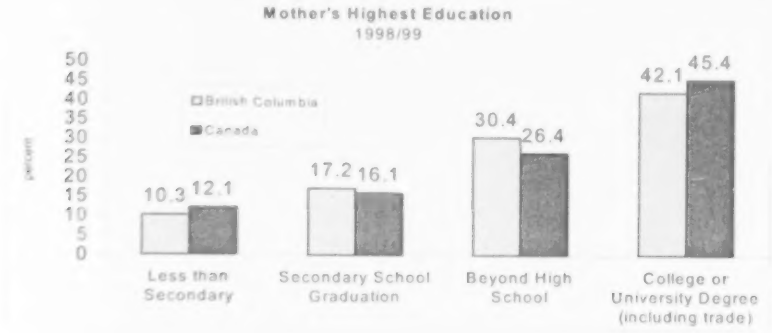
Indicator: Parental Education

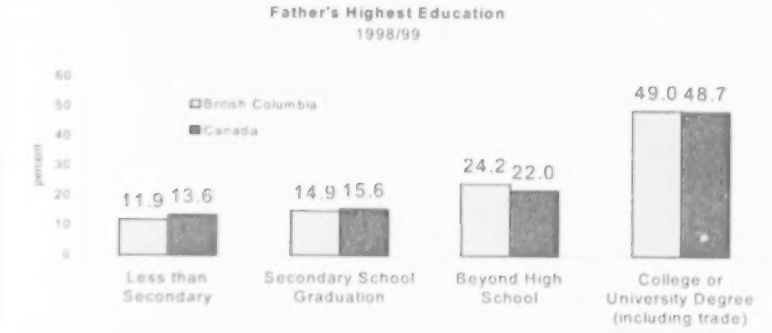
Analysis:

- In 1998/99, a greater number of BC mothers advanced beyond high school when compared on a national level. However, fewer of these BC mothers earned a college or university degree or trade designation.
- The educational attainment of BC fathers is marginally higher than the national average.

Rationale:

- Parental educational attainment is associated with the healthy development of children.





Definition of Measure(s):

(i) Mother's Highest Level of Education is the highest level of education attained by the mother of children aged 0-5 years.

(ii) Father's Highest Level of Education is the highest level of education attained by the father of children aged 0-5 years.

Caveats:

Parents whose Person Most Knowledgeable (or spouse of the Person Most Knowledgeable) is not a biological, step, adoptive or foster mother or father, children living in Territories, children living on reserve and children living in institutions are not included.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada), Cycle 3 (1998/99), Parent Questionnaire.

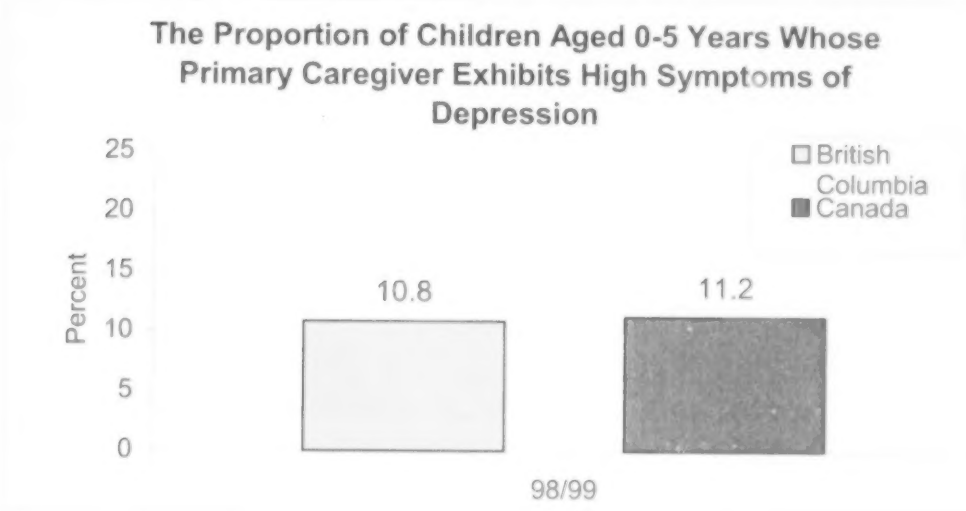
Indicator: Parental Depression

Analysis:

- In 1998/99 the percentage of BC children whose primary caregiver indicated symptoms of depression was 10.8%. This was marginally lower than 11.2% for the national average.

Rationale:

- How the primary caregiver feels is an important indicator of the child's health and well being. Optimal health and well being for a child are impossible to achieve if the primary caregiver is depressed, and therefore cannot give the best care to the child.



Definition of Measure:

The proportion of children aged 0-5 years whose Primary Caregiver exhibits high symptoms of depression.

Caveats:

Children living in Territories, children living on reserve and children living in institutions are excluded.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada), Cycle 3 (1998/99), Parent Questionnaire.

Indicator: Family Functioning

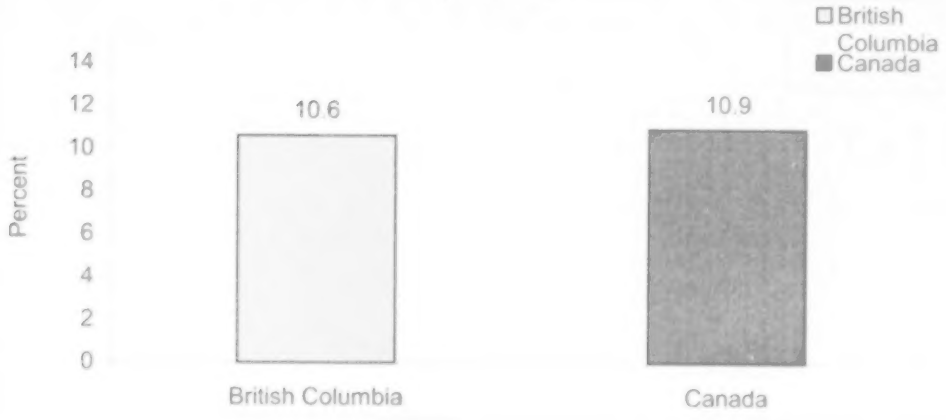
Analysis:

- In 1998/99, the proportion of children living with high levels of family dysfunction was 10.6%. This was marginally lower than the national average (10.9%).

Rationale:

- The quality of the family environment will have major effects on the health and well being of children. Research from Ontario indicates that children from families, which are classified as dysfunctional, have greater relationship problems than those from healthy families.

The Proportion of Children Aged 0-5 Years In Families With High Levels of Dysfunction.
(1998/99)



Definition of Measure:
The proportion of children aged 0-5 years in families with high levels of dysfunction.

Caveats:

Children living in Territories, children living on reserve and children living in institutions are excluded.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada), Cycle 3 (1998/99), Parent Questionnaire.

Indicator: Positive Parenting

Analysis:

- In 1998/99, 11.6% of BC children experienced low positive interaction from their parents, comparable to the national average of 12.0% of children.

Rationale:

- Parental factors and the quality of interaction between parents and children have been found to contribute significantly to both positive and negative outcomes for children. The positive things parents do have a major influence on their development. Parenting problems, on the other hand, have been recognized as critical to the development of childhood disorders, especially conduct disorders.

Definition of Measure:

Positive Interaction is the proportion of children aged 0-5 years whose parents did not exhibit low positive interaction with the child.

Caveats:

Children living in Territories, children living on reserve and children living in institutions are excluded.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada), Cycle 3 (1998/99), Parent Questionnaire.

Indicator: Reading by Adult

Analysis:

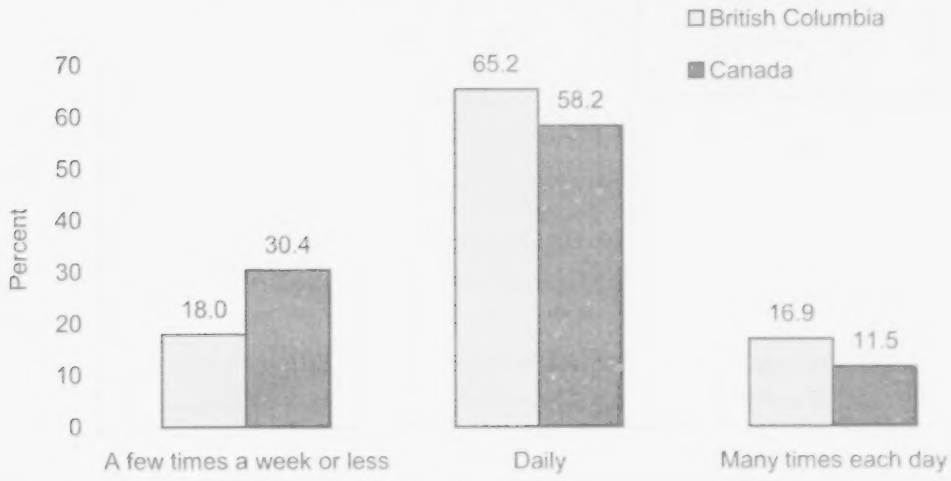
- Generally in 1998/99, BC children are read to more often than the Canadian average.
- In BC, 16.9% of children are read to "many times each day", which is more than the national average of 11.5%.

Rationale:

- Reading to children is a positive influence on children's development of literacy skills and in preparation to enter school. Children who are read to several times a day have score better on receptive vocabulary tests (PPCT-R) than those read to less often.

Distribution of Children Aged 2-5 Years By How Often An Adult Reads To The Child Or Listens To The Child Read

(1998/99)



Definition of Measure:

Distribution of children aged 2-5 years by how often an adult reads to the child or listens to the child read.

Caveats:

Children aged 0-1 years, children living in Territories, children living on reserve and children living in institutions are excluded.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada), Cycle 3 (1998/99), Parent Questionnaire.

IV. Community-Related Indicator

Indicator: Neighbourhood Satisfaction, Safety and Cohesion

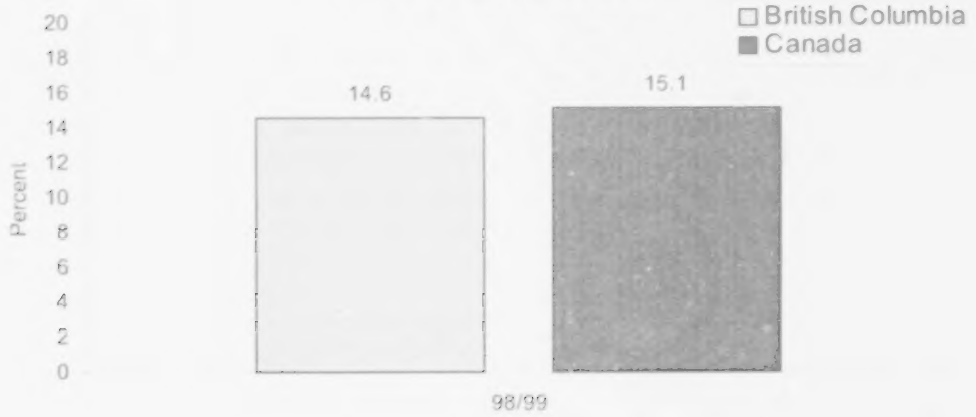
Analysis:

- In 1998/99, the proportion of BC children who were living in neighborhoods with low cohesion was 14.6%. This is marginally lower than the national average of 15.1% of children.

Rationale:

- While it is important to know how children are doing, it is equally important to understand why the outcomes occur. Therefore, indicators around the family and community focussing on services and environments as well as social cohesion are important.

Proportion Of Children Aged 0-5 Living In Neighbourhoods With Low Neighbourhood Cohesion, As Judged By The Primary Caregiver



Definition of Measure:

Neighbourhood cohesion is the proportion of children aged 0-5 living in neighbourhoods with low neighbourhood cohesion, as judged by the Primary Caregiver.

Caveats:

Children living in Territories, children living on reserve and children living in institutions are excluded.

Source:

National Longitudinal Survey of Children and Youth, Master File (Statistics Canada), Cycle 3 (1998/99), Parent Questionnaire.